CHILD SECOND LANGUAGE ACQUISITION OF TENSE ASPECT MORPHOLOGY: A BI-DIRECTIONAL STUDY OF ENGLISH AND ITALIAN

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I hereby declare that this thesis has been composed by me, it is my own work and it has not been submitted for any other degree except as specified in the title page.

ABSTRACT

The present thesis reports on the acquisition of tense-aspect morphology in three L1 Italian children learning L2 English and three L1 English children learning L2 Italian. The children, aged between seven and nine years, were observed in their home environment for a period of six months at approximately two-week intervals.

The tense-aspect forms considered are the simple past and the progressive for English, the *passato prossimo* (i.e. present perfect) and the *imperfetto* (i.e. imperfect) for Italian. A typological analysis of these forms indicates that their interaction with lexical aspectual classes creates prototypical links. Thus, the simple past and the *passato prossimo* are prototypically linked to telic predicates, the progressive is prototypically linked to activities and *imperfetto* to statives. These prototypical links are substantiated acquisitionally by L1 and L2 studies. They are also confirmed by findings from the present study, indicating that these prototypical links are transferable. The typological similarity between the progressive and the *imperfetto*, both belonging to the imperfective area, results in a bi-directional effect of transfer. The progressive is overextended to states because the learner transfers the prototypical link *imperfetto*-states; similarly, the *imperfetto* is underextended to states because the learner transfers the prototypical link progressive-activities, resulting in an underproduction of the *imperfetto* with states. However, for language transfer to occur, the learner has to reach the necessary developmental stage. That is to say, these patterns of overextension and underextension are produced after the relevant prototypical links have been acquired. Thus, before being overgeneralized to states, the progressive first marks activities. Similarly, the *imperfetto* first appears with states, before being avoided with them.

Language transfer can also explain another pattern of overextension and underextension in the interlanguage of L2 Italian children: the overextension of the perfective auxiliary *avere* and the consequent underextension of the other perfective auxiliary, *essere*. A correlation between auxiliary selection and past participle agreement was found in the following: considering unaccusative verbs with subjects other than masculine singular, past participles preceded by *essere* agreed in gender and number with the subject, whereas those preceded by *avere* were virtually left unmarked. The phenomenon relating *essere*-selection to past participle agreement is not reflected in an English equivalent. Therefore, the L1 acts as a filter preventing the children from agreeing the past participle with the subject. Furthermore, past participle agreement indicates an affected subject, which, being a marked subject choice, can represent a problem for the L2 learner. The marked status of affected subjects combined with L1 influence would predispose the children towards leaving the past participle unmarked, and this would results in *avere* being overgeneralized.

The longitudinal and bi-directional research design, where two languages represent both the source and the target, aims at showing the effects of language transfer in learners that, because of their age, still have the potential of becoming native-speakers of the target language. Child second language acquisition is thus compared to both first language acquisition and adult second language acquisition. Like first language acquirers and unlike adult second language learners, child second language learners display morphological sensitivity. Like adult second language learners and unlike first language acquirers, child second language learners are influenced by language transfer.

CONTENTS

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ABBREVIATIONS

I. GENERAL

L1	first language
L2	second language
IL	interlanguage
SLA	second language acquisition

II. VERB FORMS

AUX	auxiliary
COP	copula
CP	compound past
GER	gerund
IMPF	imperfect
IMPRS	impersonal
INF	infinitive
IRRP	irregular past
PP	past participle
PRES	present
PROG	progressive
REFL	reflexive
REGP	regular past

III. VERB CLASSES

STA	state
ACT	activity
ACC	accomplishment
ACH	achievement

IV. TRANSCRIPTION CONVENTIONS (based on MacWhinney 1995)

INV	investigator
-	suffix marker
&	fusion marker
+	compound or rote form marker
@l1	segment in the participant's native tongue
@o	onomatopoeia
@u	UNIBET (= phonetic) transcription
#	pause between words
+...	trailing off
+..?	trailing off of a question
+/.	interruption
+"	quotation follows
+".	quotation precedes
+,	self completion
++	other completion
[= text]	explanation – translation
[/]	retracing without correction
[//]	retracing with correction

INTRODUCTION

This dissertation focuses on the acquisition of tense-aspect morphology in L1 Italian children learning L2 English and in L1 English children learning L2 Italian. This bi-directional design, where two languages represent both the source and the target, is geared towards showing the effects of language transfer in learners that, because of their age, have the potential of becoming native-speakers of the target language. What makes child SLA interesting is its having the characteristics of both L1 acquisition and adult L2 acquisition.

The *genius loci* of this dissertation is the concept of prototypicality, which stemmed from the pioneering research conducted by Rosch (1973, 1975, 1978 *inter alia*) initially on focal colours and later on natural and cultural categories. Categories are cognitive representations of world phenomena. A prototype is the best example of a category; for instance, within the category 'bird', a robin is ranked highest, a bat is ranked lowest (Rosch 1975). Thus, a robin is a prototypical example of the category 'bird' whereas a bat is a peripheral example. Category membership is gradient: as an example of the category 'bird', a hawk is a better than a bat but it is still worse than a robin. Categories consist of good and bad members that do not necessarily all share the same attributes but are connected by a series of overlapping attributes or family resemblances (Wittgenstein 1958, Rosch & Mervis 1975). For the category 'game', Wittgenstein (1958) showed that there is no set of attibutes that all games share. Instead, each game shares some attributes with one or more games. Prototypical members share the highest number of attributes with other members of their category whereas peripheral members share the lowest number of attributes with other members of their category. However, peripheral members share some attributes with other adjacent categories, which points to the fuzziness of category boundaries. For instance, a bat shares fewest attributes with other members of the category 'bird'; nevertheless, it shares several attributes with another neighbouring category, namely 'mammal'. Since categorization is basic to linguistic processes, prototypicality has been prolifically extended to linguistic theory as well as to language acquisition, first and second, as will be evident throughout this dissertation.

This dissertation is divided into five chapters. The first chapter overviews theoretical approaches to tense-aspect, considering grammatical aspect, lexical aspect and their interaction through a comparison between English and Italian tense-aspect systems. The verb forms considered are, in English, the simple past and the progressive; in Italian, the *passato prossimo* (i.e. present perfect/compound past) and the *imperfetto* (i.e. imperfect). Each one of these verb forms is described in terms of its prototypical features. As to verb classes, the main classification systems are discussed and the four Vendler (1967) classes, i.e. states, activities, accomplishments, achievements, are individually illustrated. Accomplishments and achievements can be grouped as telic predicates. Verb classes interact with verb forms producing what I labelled as 'prototypical links'; namely best links between tense-aspect forms and lexical aspectual classes. Thus, the *passato prossimo* and the simple past are prototypically linked to telics, the progressive is prototypically linked to activities and the *imperfetto* is prototyically linked to states. The crucial role of lexical aspect is also evident in the selection of the perfective auxiliary in Italian.

The relationship between tense-aspect forms and lexical aspectual classes creates prototypical links that are substantiated acquisitionally; this is discussed in the second chapter. This study is located within the framework of the 'aspect hypothesis' (Shirai 1991; Shirai & Andersen 1995; Andersen & Shirai 1996), which predicts the influence of lexical aspect in L1 and L2 acquisition of tense-aspect morphology. Therefore, this chapter presents L1 and L2 acquisition accounts of tense-aspect from a cognitive-functional standpoint that is relevant to the 'aspect hypothesis'. After reviewing studies in L1 acquisition and adult L2 acquisition of English and Italian, child L2 acquisition is defined and findings from child L2 studies in English and Italian are illustrated. The definition of child L2 acquisition raises the issue of language transfer, which is considered in terms of its manifestations and of the factors that appear to regulate it. However, the few studies addressing the role of language transfer in the second language acquisition of tense-aspect have been conducted with adult learners. Since this dissertation intends to examine the role of language transfer in child second language acquisition of tense-aspect morphology, the rationale of why a longitudinal-bidirectional study would suit this purpose is also discussed.

The first two chapters provided a typological-acquisitional background to the study. This leads us into the third chapter, which starts with a statement of the research questions and hypotheses that have inspired this bi-directional study. These relate to the existence of prototypical links and their transferability in child L2 tense-aspect forms, the spread of tense-aspect forms in L2 English and L2 Italian, the similarities and dissimilarities between child SLA and L1 acquisition, on the one hand, and adult SLA on the other. This chapter describes the bidirectional-longitudinal design of the study, with details on the participants, the multi-faceted elicitation procedures and the two-level coding, which involves verb forms and verb classes. The speech samples were collected over a period of six months per group of learners, and subsequently transcribed, coded and analyzed.

The fourth chapter presents the results obtained through two types of analyses. Following Bardovi-Harlig (2000), two analyses were performed using raw scores and percentages: an *across-category* analysis and a *within-category* analysis. The across-category analysis focuses on the spread of verb morphology across the four Vendler (1967) classes. The verb forms under investigation are the irregular past, the regular past, and the progressive for L2 English; the bare past participle, the compound past and the imperfect in L2 Italian. As to the compound past, the issue of auxiliary selection is also dealt with. However, since this type of analysis is affected by the frequency of tokens in a verb class, this sensitivity is controlled through the within-category analysis, which depicts the development of verbal morphology in each of the four verb classes. In addition to the above verb forms, the *within-category* analysis also includes the base form for L2 English and the infinitive as well as the present in L2 Italian. Finally, the L2 English and L2 Italian results are compared.

The fifth chapter discusses the findings of the study. The role of language transfer is pinpointed by pulling together the overlapping strands of inquiry that inspired this study: the acquisition of tense-aspect morphology in child L2 learners, the relationship between L1 acquisition and child L2 acquisition on the one hand and between child L2 acquisition and adult L2 acquisition on the other. The aim of this general discussion is the delineation of child L2 acquisition as a distinctive area of investigation partaking of both L1 acquisition and adult L2 acquisition. Implications for potential future research are outlined in the last section of this dissertation.

CHAPTER 1
THEORETICAL APPROACHES TO TENSE-ASPECT

INTRODUCTION

This dissertation explores the role of aspect in the second language acquisition of verb morphology related to past reference. The focus is the past and the influence of aspectual properties on its morphological marking. The aim of this chapter is to provide a theoretical background to the analysis and discussion of the findings of my study.

The relationship between the typological features of aspect and its acquisitional patterns was pointed out by Lyons (1977), who emphasizes the crucial importance of aspect to the grammar of languages:

"Aspect is, in fact, far more commonly to be found throughout the languages of the world than tense is: there are many languages that do not have tense, but very few, if any, that do not have aspect. Furthermore, it has been argued recently that aspect is ontogenetically more basic than tense, in that children whose language has both, come to master the former more quickly than they do the latter" (p.705).

As will be evident throughout this chapter, tense and aspect are so deeply intertwined that it can be very complicated to disentangle them. This explains the reason for the label 'tense-aspect'.

Aspectually, a sentence shows the interaction of two components: a particular viewpoint encoded by certain verb forms and a particular inherent semantics expressed by a certain type of predicate. The former will be called 'grammatical aspect' and the latter 'lexical aspect'.

In this chapter, I will consider grammatical aspect (1.1), lexical aspect (1.2), and their interaction (1.3). Grammatical aspect, primarily distinguished between perfective (1.1.1)

and imperfective (1.1.2), is linguistically encoded by inflections or periphrases. The simple past (1.1.1.1) conflates perfective and imperfective aspect; the *passato prossimo*[1] (1.1.1.2) is a perfective past; the progressive (1.1.2.1) and the *imperfetto* (1.1.2.2) are imperfective forms. Lexical aspect is inherent to the predicate in that a situation[2] is classified according to the semantic features of the predicate that represents it (1.2.1). The main classification systems are discussed (1.2.2) and the four Vendler (1967) classes are individually considered (1.2.3), together with the phenomenon of type shift from one class to another (1.2.4) and the analysis of the internal structure of situations (1.2.5). The interaction of these four classes with perfective (1.3.1) and imperfective forms (1.3.2) emphasizes the influence of lexical aspect in the choice of these forms and in the meaning they can acquire. The crucial role of lexical aspect is also evident in the selection of the perfective auxiliary in Italian (1.3.1.1).

Finally, this chapter aims at drawing a systematic comparison between the Italian and the English tense-aspect systems, and to serve this purpose parallel examples will be provided.[3] The following convention is used here in the presentation of the examples: a 'prime' next to a letter indicates a parallel example in the corresponding language. For instance, -a- might indicate an English sentence and -a'- would then indicate the parallel sentence in Italian.

1.1 GRAMMATICAL ASPECT

The importance of a semantic perspective in the dimension of temporality was first realized by the Stoics, who noticed that tenses express not only deictic distinctions but also aspectual distinctions, that is whether the situation referred to is perfect, i.e. complete or imperfect, i.e. incomplete. The term 'aspect' is traditionally derived from a translation of the Russian term 'vid' used to describe the perfective/imperfective opposition grammaticalized in Slavonic languages. The term is extended to other grammaticalized oppositions across languages, such as the progressive/non-progressive distinction in English.

Comrie (1976:3) defined aspect as "different ways of viewing the internal temporal constituency of a situation". Tense is deictic in that it locates a situation on the temporal axis, the most common tenses being past, present and future. Aspect is non-deictic in that it refers to how a situation is viewed by the speaker, who chooses certain linguistic devices to describe it. The difference between the parallel examples below is one of aspect and not of tense, because the sentences are all in the past.

(1-1) a. Yesterday it was pouring with rain.
a'. Ieri pioveva a dirotto.
b. Yesterday it rained all day.
b'. Ieri ha piovuto tutto il giorno.

The situation in (1-1a&a') is perceived as unfolding with neither beginning nor end, as if the speaker were viewing it internally; whereas in (1-1b&b') the situation is perceived globally as a point in time, as if the speaker were viewing it externally. The former sentences express perfectivity while the latter express imperfectivity. Grammatical aspect reflects the speaker's viewpoint on a situation. The speaker can choose to view the situation as a whole and presented it as a closed event, like in (1-1b&b'), or else the same situation can be presented partially, as an open event, like in (1-1a&a').

Givón (1993) illustrates the distinction between perfective and imperfective through the metaphor of a camera focus. The perfective is similar to the picture of an object taken from far: the view is comprehensive but fails to provide details of the object. Conversely, the imperfective corresponds to the picture of an object taken from near: the focus is on certain details of the object but not on the overall view, because the outer edges fail to fit in the frame.

From a pragmatic point of view, the perfective is associated with the foreground of a situation whereas the imperfective is associated with the background (Hopper 1979).

'It is evidently a universal of narrative discourse that in any extended text an overt distinction is made between the language of the actual story line and the language of supporting material which does not itself narrate the main events. I refer to the former – the parts of the narrative which relate events belonging to the skeletal structure of the discourse – as FOREGROUND and the latter as BACKGROUND.' (p.213)

The foreground is usually characterized by a sequence of dynamic events in a chronological order: every event is viewed as a whole because it needs to be complete before the subsequent one. Foregrounded events are the main line of narration and they answer the question: 'What happened (next)?'

(1-2) a. John got up, went downstairs, closed the window and went back to bed.
a'. Gianni si alzò, scese di sotto, chiuse la finestra e tornò a letto.

The background is usually characterized by descriptive situations overlapping with the foreground because they constitute the sideline of narration and provide the context for it. Backgrounded events are not sequentially ordered and are viewed as happening. For this reason, if the foreground is not supplied, the narration is somehow suspended, as illustrated in the parallel examples below:

(1-3) a. It was noon, the sun was shining and John was swimming in the ocean...
b. ... when suddenly a shark attacked him.
a'. Era mezzogiorno, il sole splendeva e Gianni nuotava nell'oceano ...
b'. ... quando all'improvviso uno squalo lo attaccò/ha attaccato.

The idea of perfectivity reminds of a typical past event whereas the idea of imperfectivity reminds of a typical present event. What this implies is the difficulty of defining aspect without reference to tense. This is particularly true of the perfect aspect, which sets up a relationship between two points in time. Klein (1994) incorporated the temporal dimension in his treatment of aspect. Based on a revision of Reichenbach's (1947) tense categories, Klein defined tense as the relationship beween topic time (TT) and time of utterance (TU) and aspect as the relationship between topic time (TT) and time of situation (TSit). The notion of topic time is pivotal to both tense and aspect. 'The topic time is the time span to which the claim made on a given occasion is constrained' (Klein

1992:535). TT is expressed by the finite part of the predicate whereas TSit is expressed by the non-finite part of the predicate, that is to say the bare predicate.

(1-4) a. At noon, John was going home.
a'. A mezzogiorno, Gianni andava/stavo andando a casa,

There is a distinction between the time when John went home (TSit) and the time for which the claim about John going home is made (TT). TSit represents the non-finite part of the predicate, i.e. *John go home/Gianni andare a casa*, whereas TT represents the finite part of the predicate on which a claim is made. TSit and TT are different from TU, the time of utterance. In the example above, TT is before TU: a claim is made about some time prior the moment of utterance, which justifies the use of the past tense. However, the time for which this claim is made is included within the time of the situation, i.e. TT includes TSit. This gives the impression of a situation viewed from an internal perspective and explains the use of the progressive/imperfective aspect.

The difference between tense and aspect is that the former pertains to the relationship between the finite part of the predicate and the moment of speech whereas the latter pertains to the relationship between the finite and the non-finite part of the predicate. These definitions capture the deictic nature of tense versus the non-deictic nature of aspect in that the moment of speech is a key variable in the definition of tense, but not in the definition of aspect. The relations schematized below are adapted from Klein (1992, 1994):

(1-5)

TENSE		ASPECT	
PAST:	TT before TU	IMPERFECTIVE:	TT includes TSit
PRESENT:	TT includes TU	PERFECTIVE:	TT at TSit
FUTURE:	TT after TU	PERFECT:	TT after TSit
		PROSPECTIVE:	TT before TSit

The empirical study presented in this dissertation deals with aspectual differences encoded in the past. Therefore in the subsections that follow, I will concentrate on the

perfective and imperfective aspects and discuss their linguistic realizations in Italian and English.

1.1.1 The perfective

The prototypical perfective meaning is conveyed by the past tense. In his cross-linguistic survey of tense-aspect typologies, Dahl (1985:78) stated that a perfective verb "will typically denote a single event, seen as an unanalyzed whole, with a well-defined result or end-state, located in the past". The situation is viewed as complete, with a beginning and an end: "perfectivity involves lack of explicit reference to the internal temporal constituency of a situation" (Comrie 1976:21). For this reason, the perfective is considered as the unmarked member of the perfective/imperfective distinction. Borrowing a term from classical Greek aspectology, the past tense in its prototypical perfective value is often defined as aorist.

According to Klein (1992; 1994), the perfective has a TT including the end of TSit and the beginning of time after TSit, that is to say, the time for which a claim is made is partially included in the post-time of the situation.

(1-6) a. John opened the letter.
a'. Gianni aprì/ha aperto la lettera.

The time for which this assertion is made includes part of the time before and part of the time after the opening of the letter by John. The post-time is characterized by the letter being open.

In English, the simple past combines perfective and imperfective aspect (1.1.1.1). In Italian there are two perfective markers: the *passato remoto*, a preterit, and the *passato prossimo,* a compound past with the double function of present perfect and preterit (1.1.1.2).

1.1.1.1 The simple past

The primary function of the simple past is deictic in that it locates a situation before the moment of utterance. According to Taylor (1995:151), 'there are three groups of meaning associated with the past tense: past time (and by extension historical and fictional narrativity), counterfactuality and pragmatic softening'. Reference to past time is the central meaning of the past tense, whereas counterfactuality and pragmatic softening are more peripheral. This is justified by the fact that central meanings are systematic and frequent whereas peripheral ones are not. Virtually any verb can be inflected in the simple past when past time reference needs to be expressed. The counterfactual uses of the simple past appears with only a few contexts: *if*-clauses (1-7), expressions of wish (1-8a) and desire (1-8b), suppositions (1-9a) and suggestions (1-9b):

(1-7) If you worked harder ...

(1-8) a. I wish you were here.
b. It would be nice if you were here.

(1-9) a. Suppose I bought a new car...
b. It's time we stopped this silly argument.

As a pragmatic softener, the simple past represents a metaphorical extension of the past tense to convey a distancing of the speaker from their utterance, the effect of which is softened as a result. This use is primarily restricted to modals:

(1-10) a. Could/Would you help me?
b. I wanted to ask you a favour.

As explained in 1.1.2.2, this use of the simple past as counterfactual marker and pragmatic softener is typically expressed in Italian by the *imperfetto*, which suggests that the simple past and the *imperfetto* share certain semantic features.

The simple past is basically a past tense where perfective and imperfective features are conflated. However, the discussion below indicates that perfectivity represents the prototypical meaning of the simple past.

Pulgram (1984, 1987) analyzed the function of past tenses in Romance and Germanic languages by assigning an aspectual label to each tense: aoristic, depictive and resultative, which correspond to perfective, imperfective and perfect, respectively. Each one of these aspects is related to an implicit question: 'What happened?' for the aorist; 'What were the circumstances?' for the depictive and 'What is the end, the result?' for the resultative. Pulgram defined the English past tense as both aoristic and depictive. The depictive aspect in English can be expressed by both the simple past and the past progressive, whereas in Italian it is expressed by the *imperfetto*. This shows that the simple past can act as an imperfective marker for non-progressive meanings. In other words, the simple past can express continuous/non-progressive aspect and habitual aspect, two of the three components of imperfectivity (1.1.2). However, the past progressive can also cover these two imperfective sub-areas, in addition to being the prototypical marker of progressivity (1.1.2.1).

A crucial dissimilarity between the simple past with the past progressive is their level of compatibility with stativity. The progressive form is generally incompatible with stative predicates, unless these represent stage-level properties (1.2.3.1, 1.3.2). Other stative progressives are considered as a marked choice (*ibidem*). Therefore, by default, a past state is encoded by a simple past. For example, the use of the progressive form with the stative predicates below would be unacceptable.

(1-11) a. The little boy had big blue eyes.
b. *The little boy was having blue eyes.
c. John knew everybody in the neighbourhood.
d. *John was knowing everybody in the neighbourhood.

The comparison with the Italian *imperfetto*, which fully grammaticalizes imperfectivity, highlights the imperfective traits of the simple past. In fact for the sentences in (1.11) Italian would choose the *imperfetto*:

(1-12) a. Il bambino aveva dei grandi occhi blu.
b. Gianni conosceva tutti nel quartiere.

The sentences in (1-11) and (1-12) encode continuous/non progressive aspect (1.1.2), although with stative predicates continousness overlaps with habituality (1.1.2, 1.1.2.1, 1.1.2.2). There is support for the argument that imperfective aspect is a non-prototypical meaning of the simple past. The centrality of a feature is characterized by 'obligatoriness of expression' (Dahl 1985:188), which means that the feature in question is marked systematically and obligatorily by one form because no linguistic alternatives are available. The simple past is not obligatory and systematic as a marker of imperfectivity, where it competes with the past progressive. Moreover, habitual aspect can also be expressed by optional periphrases, such as *used to*+infinitive (1-13c), *would*+infinitive (1-13d).

(1-13) a. John visited his grandparents every day. (imperfective/habitual)
b. John was visiting his grandparents every day.
c. John used to visit his grandparents every day.
d. John would visit his grandparents every day.

The strong connection between perfective aspect and pastness (1.1.1) points to perfectivity as the prototypical meaning of the simple past. In fact, Smith (1997:220-222) treats the simple past as the 'English perfective'. Similarly, in the light of the acquisitional data in Brown (1973 – see 2.1, 2.1.1), Taylor (1995:243) argued that the central meaning of the past tense, which he previously associated with past time reference (Taylor 1995:149-151), must be further delimited to 'completion in the immediate past of a punctual event, the consequences of which are perceptually salient at the moment of speaking'.

1.1.1.2 The passato prossimo

In Italian, perfectivity is expressed by the *passato remoto* (preterit/simple past) and the *passato prossimo* (present perfect/compound past). As indicated by their names, the former encodes a distant past whereas the latter encodes a close one, thus applying a spatial metaphor to a temporal dimension, a well-known linguistic pattern stemming from the deictic nature of time and space. The *passato remoto*, is a perfective past used for narrative purposes in the written language; in the spoken language it is present in the central and southern varieties but it is absent in the northern ones. In this study, the children who had Italian as native language as well as those who had it as target language were exposed to the northern variety, therefore the *passato remoto* is not relevant to this discussion.

The *passato prossimo* is a periphrastic tense that consists of an auxiliary (*avere* or *essere)* followed by a past participle. There is a growing body of research on the rules that govern auxiliary selection in Italian: the phenomenon is discussed 1.3.1.2.

The *passato prossimo* originated from the compound past developed in Vulgar Latin as a marker of resultativity, which was absent in Classical Latin. Originally restricted to perfect aspect, the *passato prossimo* expanded at the expenses of the *passato remoto* and acquired the perfective value of the latter. Following a well-attested pattern in the evolution of Romance languages, the present perfect developed into a perfective (Bybee and Dahl 1989). Taking the spatial metaphor mentioned above, expressing a past event with a present perfect makes it 'closer' to the current experience of the speaker and therefore more salient and relevant.

(1-14) a. L' estate scorsa Gianni è andato al mare. (passato prossimo)
the summer past be.PRES.3sg go-PP to.the seaside
'Last summer John went to the seaside'.
b. L' estate scorsa Gianni andò al mare. (passato remoto)
the summer past go-PAST-3sg to.the seaside

'Last summer John went to the seaside'.

In (1-14a) the function of the *passato prossimo* is similar to that of the simple past in English. However, the *passato prossimo* is ambivalent: although it often substitutes for the *passato remoto*, it stills retains its original perfect meaning in certain obligatory contexts, where the *passato remoto* is disallowed. The lack of an alternative periphrasis for the perfect meaning points to this as the prototypical meaning of the *passato prossimo*. The obligatory contexts for the *passato prossimo* are exemplified below:

(1-15) a. Il film è appena iniziato.
the film be.PRES.3sg just start-PP
'The film has just started'.
b. Gianni è stato in Australia molte volte.
be.PRES.3sg be.PP to many times
'John has been to Australia many times'.
c. Gianni è arrivato .
be.PRES.3sg arrive-PP
'John has arrived'.

The examples above show that the *passato prossimo* is similar to the English present perfect when it expresses the notion of 'current relevance' (Comrie 1976:52): (1-15a) is a perfect of recent past, (1-15b) is an experiential perfect and (1-15c) is a perfect of result. According to Dahl (1985:132), these are prototypical occurrences of the present perfect.

1.1.2 The imperfective

The imperfective aspect views a situation internally and, according to Comrie (1976:25), it can be subdivided into the following components:

(1-16) IMPERFECTIVE < HABITUAL / CONTINUOUS; CONTINUOUS < PROGRESSIVE / NON-PROGRESSIVE

The features listed above overlap to a certain extent: continuousness can be progressive or non-progressive depending on the type of time reference (punctual or non-punctual) and on the lexical nature of the predicate (stative or non-stative). Similarly habituality can be considered as a form of continuousness in that a situation is habitual because it is recurrent, and hence continuous, over a time span. This is particularly evident with states, which are continuous by definition, and when they become habitual the dimensions of continuousness and habituality are closely interrelated. Continuousness appears to be the defining trait of imperfectivity: a situation is progressive if it is continuous with reference to a point in time; a situation is habitual if it is continuous over a period of time.

The imperfective foregrounds the internal structure of a situation and backgrounds its temporal boundaries and this gives the impression of time reference being somehow blurred and of the viewpoint being partial. This explains why imperfective forms are typically impervious to a definite location along the time axis. For example, if an event is in progress at a point in time, this implies that the event in question started before that point in time and potentially continued afterwards: the initial and final endpoints of the event are not specified.

As mentioned above, the progressive aspect is anchored to a particular point in time when the event is taking place. Progressiveness, according to Dahl (1985) is closely related to on-goingness: "'To go on' is basically a relation between a dynamic situation and a point in time"(p.91). This implies that the prototypical progressive combines continuousness and non-stativity.

(1-17) a. Yesterday at noon John was watching television.
a'. Ieri a mezzogiorno Gianni guardava/stava guardando la televisione.

The parallel examples in (1-17a&a') illustrate an ongoing situation as one starting prior to the reference point and presumably extending beyond it: the lack of temporal

boundaries and the notion of indefiniteness are typical features of imperfectivity of which progressiveness is a subclass.

(1-18) a. When John arrived, Mary was sleeping.
a'. Quando Gianni è arrivato, Maria dormiva.
b. While John was working, Mary was sleeping.
b'. Mentre Gianni lavorava, Maria dormiva.

In the parallel examples above, the subordinate clauses represent the time reference. In (1-18a&a'), the event in the subordinate clause is punctual: Mary's sleeping was in progress at the time of John's arrival. In (1-18b&b'), the event in the subordinate clause is durative: Mary's sleeping is simultaneous to John's working; in other words, the event in the main clause is continuous, but not progressive, with respect to the event in the subordinate clause.

Comrie (1976) discussed habituality and progressiveness but not continuousness/non-progressiveness, leaving it to be defined as imperfective which is neither habitual nor progressive. As such, continuousness represents the unmarked feature of imperfectivity and it is strongly associated with stativity in that states are inherently continuous but non-progressive:

(1-19) a. John wanted a new car.
a'. Gianni voleva una macchina nuova.

(1-20) a. The town lay at the mouth of the river.
a'. La città si trovava alla foce del fiume.

Habituality and continuousness overlap when stativity is involved: in the examples below, it is the continuousness of a situation holding without intermission over a period of time that makes the situation habitual.

(1-21) a. The church stood/used to stand at the top of the mountain.
a'. La chiesa si ergeva sulla cima della montagna.

(1-22) a. John loved/used to love Mary.
a'. Gianni amava Maria.

Depending on the nature of the predicate, habituals can express a situation repeated over a period of time so as to represent a pattern (1-23a&a'), or else they can express a situation protracted over a period of time (1-23b&b').

(1-23) a. John smoked/used to smoke twenty cigarettes a day when he was a student.
a'. Gianni fumava dieci sigarette al giorno quando era studente.
b. John liked/used to like smoking when he was a student.
b'. A Gianni piaceva fumare quando era studente.

The predicate in (1-23a&a') is telic, i.e. it shows a natural endpoint in the smoking of all those cigarettes: habituality involves a re-occurrence of this event over a number of occasions. The predicate in (1-23b&b') is stative, i.e. it shows a mental predisposition and no inherent endpoint: habituality involves a situation holding over a period of time. In this case, habitual aspect and continuous aspect overlap because the predicate is stative. It could be argued that habitual aspect is indeed a form of continuousness even with non-stative predicates. In fact an event is habitual because its reiteration over a period of time constitute a pattern that is perceived as continuous. During that interval represented by his student life, John certainly did many other things besides smoking twenty cigarettes a day. However the smoking events are perceived as the most prominent part of that interval. Since the non-smoking events are in the background, the smoking events can be seen as stretching to the point of covering the whole interval: what makes something habitual is its continuousness. This is particularly evident in the example below where the hyperbolic frequency shows a correspondence between habitual and continuous aspect:

(1-24) a. John was always smoking when he was a student.
a'. Gianni fumava sempre quando era studente.

According to Comrie (1976:28),

"habituals describe a situation which is characteristic of an extended period of time, so extended in fact that the situation referred to is viewed not as an incidental property of the moment, but, precisely, as a characteristic feature of a whole period".[4]

Habituality should be distinguished from iterativity (Comrie 1976; Dahl 1985; Brinton 1988). The former involves a situation or a series of situations characteristic of a time interval, whereas the latter involves the repetition of a situation on a single occasion.

(1-25) a. John walked/used to walk to school every morning. (habitual)
a'. Gianni andava a scuola a piedi ogni mattina.
b. John coughed all night. (iterative)
b'. Gianni ha tossito tutta notte.

The parallel examples in this section show that Italian and English differ in their linguistic encoding of imperfectivity. Considering only past time reference, which is a primary interest of this dissertation, the progressive form in English encompasses the continuous (progressive and non-progressive) area and also the habitual one. The simple past, a perfective maker, also covers most of the imperfective area, namely the habitual part and the continuous/non-progressive part. Habituality can optionally be encoded by the periphrases *used to*+infinitive and *would to*+infinitive. In Italian, the *imperfetto* is an imperfective past: the progressive periphrasis, *stare*+gerund, is similar to its English counterpart but, unlike the English progressive form, it is optional and primarily restricted to progressive aspect. Moreover, the Italian progressive periphrasis can always be replaced by the *imperfetto,* but the reverse is disallowed.

The imperfective features of the simple past are illustrated in 1.1.1.1. In the subsections below, the progressive form and the *imperfetto* will be considered.

1.1.2.1 The progressive form

Progressives are periphrases hinging on a stative verb (*be* in English, *stare* in Italian). They derive from locative constructions where a spatial situation is metaphorically extended to a temporal-aspectual one. Such an observation is at the basis of the localist theory of aspect (Anderson 1973) which, drawing a parallel between aspectual meaning and locative constructions, defined progressiveness as being 'in' a situation. Thus, if *John is doing something*, this means that *John is in the process of doing something.*

Historically, the English progressive form emerged during the Middle English period but started its main expansion in the sixteenth century (Baugh and Cable 1993). It was a locative construction composed by *be* and a verbal noun governed by locative prepositions such as *at, in, on.*

(1-26) a. John was on laughing.
b. John was in/at working.

The English progressive form has a wide scope both syntactically and semantically. Syntactically it is available to all tenses and can combine with the perfect aspect. Semantically, as an imperfective marker, it obligatorily marks progressive aspect but it can also cover the continuous/non-progressive and the habitual aspects. The progressive form is also used to convey future meaning.

As suggested by its name, the progressive form describes a situation as 'in progress', which means that this construction conflates durativity and non-stativity. 'In its basic use the English progressive focusses on the internal stages of durative, non-stative situations' (Smith 1991:222). The progressive form typically denotes dynamism, and this characteristic derives from viewing an event internally and therefore focussing on its successive stages as it unfolds. Thus the progressive form is basically durative and dynamic:

(1-27) a. At midnight, Mary was still dancing with John.

a'. A mezzanotte, Maria stava ancora ballando con Gianni

b. Last night Mary was dancing with John.

b'. * La notte scorsa Maria stava ballando con Gianni[5]

The difference between (1-27a) and (1-27b) lies in the time reference: the former example refers to a point in time whereas the latter example refers to a period of time. Both examples displays durativity, i.e. continuosness, and dynamism but only the event in (1-27a) can be considered as prototypically progressive. Conversely, the event in (1-27b) is continuous but not progressive. This distinction is particularly evident when a comparison with Italian is drawn. Since the Italian progressive form is strongly restricted to the marking of progressive aspect (Bertinetto 1997), it provides a good diagnostics test for the identification of this imperfective feature. In fact, the progressive in (1-27a') is acceptable whereas the progressive in (1-27b') is not.

Another feature that is closely associated with the progressive form is temporariness: the situation is durative but its duration is somehow limited. The progressive form indicates impermanence because it presents a situation dynamically, as a process in progress and as such the situation cannot last indefinitely. This is particularly evident with statives, which acquire a stage property when occurring with the progressive form (see 1.3.2).

(1-28) a. John was living in London.

b. John lived in London.

(1-29) a. John was looking pale.

b. John looked pale.

The difference between the (a) and (b) examples above is that the former imply that John lived in London and looked pale only temporarily whereas such an implication is missing in the latter. Because of its intrinsically progressive nature, the Italian progressive form is incompatible with statives. In fact, (1-30a) and (1-30b) show that the Italian progressive form, equivalent to (1-28a) and (1-29a), is ungrammatical.

(1-30) a. *Gianni stava vivendo a Londra.
b. *Gianni stava sembrando pallido.

The progressive form in English can express habitual meaning (1-31a). Habituality is characterized by continousness, and continuousness is a distinctive trait of the progressive form that becomes particularly evident when habitual situations are emotionally overstated (1-31b). In Italian the use of the progressive form as marker of habitual aspect is generally disallowed (1-31a'), although some varieties would accept it to convey hyperbolic meaning (1-31b').

(1-31) a. John was regularly eating fruits for breakfast.
a'. *Gianni stava regolarmente mangiando frutta per colazione.
b. John is always eating!
b'. ?Gianni sta sempre mangiando!

Moreover, habituality can combine with progressiveness: a situation can be decomposed into several instances, each one of them is viewed as progressive and the overall situation is viewed as habitual (Comrie 1976:33). Again, this is possible in English but not in Italian:

(1-32) a. John used to sing happily.
a'. Gianni cantava/era solito cantare allegramente.
b. John used to be singing happily whenever we visited him.
b'. *Gianni era solito stare cantando allegramente quando andavamo a trovarlo.

This comparison between the English and the Italian progressive form carried out here shows that the former has a wider scope and more flexibility than the latter. The Italian progressive form is essentially restricted to prototypical progressiveness and because of its optionality it represents a marked choice.

1.1.2.2 The imperfetto

This account of the *imperfetto* draws on the following sources: Comrie (1976), Bertinetto (1986), and Delfitto and Bertinetto (1995). The *imperfetto* is a past tense that embodies all the basic semantic components of imperfectivity: progressiveness, continuousness and habituality. Optionally, the progressive and the habitual meanings can be expressed by periphrases: *stare*+gerund is a progressive periphrasis; *essere solito(a)/avere l'abitudine di*+infinitive are habitual periphrases. Both the progressive and the habitual periphrases are incompatible with statives, as shown in (1-33b&d):

(1-33) a. Gianni tornava / stava tornando a.casa quando incontrò Maria.
return-IMPF-3sg/ be-IMPF-3sg return-GER home when meet-PRET-3sg
'John was returning home when he met Mary.'

b. A mezzogiorno Gianni aveva / *stava avendo fame.
At noon have-IMPF-3ps/ be-IMPF-3sg have-GER hunger
'At noon John was hungry.

c. Da giovane, Gianni guidava / era solito guidare in modo spericolato.
PREP young drive-IMPF-3sg/ be.IMPF-3sg used.to drive in way reckless
'As a young man, John used to drive in a reckless way'.

d. Da giovane, Gianni aveva / *era solito avere i baffi.
PREP young have-IMPF-3sg/ be.IMPF-3sg used.to have the moustache
'As a young man, John used to have a moustache'.

The optionality of these periphrases is an indicator of their marked status: they can always be replaced by the *imperfetto*, but the reverse is not always possible because they are restricted to a specific semantic component of the *imperfetto*. The aim of these periphrases is to highlight the imperfective component they are associated with by making it more prominent. For example, the progressive meaning in (1-33a) is certainly more salient with the progressive periphrasis than with the *imperfetto* and a similar remark holds for the habitual meaning in (1-33c) expressed by the habitual periphrasis.

The existence of a periphrasis as an alternative form employed to express a certain meaning points to the non-prototypicality of that meaning: prototypical meanings are characterized by the obligatoriness and systematicity of their expression and by the lacking of alternative forms (1.1.1.1). For example, when expressing progressiveness in

English, the progressive form is obligatory and no other linguistic alternative is available. This is not the case for progressiveness in Italian, because the *imperfetto* (and the present tense) can have a progressive reading, which makes the progressive periphrasis non-obligatory. Therefore, the expression of progressiveness is a core feature of the English aspectual system and this is shown by the grammaticalization of the progressive/non-progressive distinction. Conversely, in Italian the non-obligatory encoding of the above distinction suggests that progressiveness is a non-core feature of the aspectual system.

A similar argument holds for the habitual meaning: its peripheral status is pinpointed by availability of various habitual periphrases both in Italian and English: the existence of variation in the linguistic expression of a feature indicates that the feature in question is not prototypical. Specifically, Dahl (1985) noticed that crosslinguistically, habitual aspect tends to be expressed periphrastically and this led him to conclude that habituality generally represents a peripheral meaning in tense-aspect-mood systems. Since habitual aspect is not of direct relevance to the data, its discussion will be limited.

As to the continuous meaning, it appears to be the most prototypical feature of the *imperfetto*. Bertinetto (1997) suggested that continuous aspect in Italian can be encoded by the continuous periphrasis *andare*+gerund but, its use, as Bertinetto himself recognized, is restricted to certain types of predicates. Therefore this construction can not be used as a reliable diagnostics test to identify the continuous meaning of the *imperfetto*, unlike the progressive and the habitual periphrases, which are reliable markers of the meanings they are distinctively associated with. In my view, this difficulty in finding a periphrasis that consistently highlights the continuous aspect of the *imperfetto* suggests that continuousness is such a prototypical feature of this tense that resists systematic attempts at replacing the linguistic form is affiliated with, with an alternative form. Thus, continuous aspect appears to be the central meaning of the *imperfetto*.

As mentioned in 1.1.2 and 1.1.2.1, aspect is continuous versus progressive when it is anchored to non-punctual time reference. The restriction of progressive periphrasis to prototypical progressive aspect makes it a good test for the identification of this

imperfective feature. The progressive periphrasis in (1-34b) is unacceptable because the aspect is not progressive.

(1-34) a. Ieri Gianni indossava un vestito blu.
yesterday wear-IMPF-3sg a suit blue
'Yesterday John wore/was wearing a blue suit'.
b. *Ieri Gianni stava indossando un vestito blu.

Continuous aspect is particularly evident when the *imperfetto* is applied to stative predicates (1-35), which are inherently durative. The link between *imperfetto* and stativity is discussed in 1.3.

(1-35) a. La settimana scorsa pesavo due chili di.meno.
the week past weigh-IMPF-1sg two kilos less
'Last week I weighed two kilos less'.
b. Gianni voleva a tutti i costi quella macchina.
want-IMPF-3sg at all the costs that car
'John wanted that car at all costs'.
c. La città si trovava alla foce del fiume.
the town REFL lie-IMPF-3sg at.the mouth of.the river
'The town lay at the mouth of the river'.

Both the progressive and the habitual aspect can be subsumed into the continuous aspect (1.1.2). All these features contribute to the indefinite temporal contour typical of the *imperfetto*. Because of its incompatibility with measurements of duration and the possibility for a situation to continue beyond the time reference, the *imperfetto* is generally regarded as a 'vague' tense.

It seems to me that this vagueness produced by the *imperfetto* is a common denominator accounting for the metaphorical uses of this tense: narrative, unreal, hypothetical and softening. The narrative *imperfetto* is applied to perfective contexts and therefore it can be replaced by the *passato remoto* or the *passato prossimo*. The ambivalence of an imperfective form in a perfective context generates a stylistic effect. Although the

situation denotes a closed interval, the natural compatibility of the *imperfetto* with open intervals blurs the boundaries of the situation, which is perceived as durative and indeterminate. The narrative *imperfetto* is frequent in the literary language (1-36a) and in the journalistic reports (1-36b).

(1-36) a. Nel 1321 moriva Dante Alighieri.
In.the die-IMPF-3sg
'In 1321 Dante Alighieri died'.
b. Al novantesimo minuto, l' attaccante segnava il gol della vittoria.
At.the ninetieth minute the striker score-IMPF-3sg the goal of.the victory
'At the ninetieth minute, the striker scored the winning goal'.

Because of its indeterminate contour, the *imperfetto* metaphorizes a sense of distance from reality that can be extended to cover the notion of counterfactuality. The unreal *imperfetto* projects the situation into a distant and fictitious world: this use is typical of oniric narratives (1-37a) and children's role-taking games, also known as ludic *imperfetto* (1-37b)

(1-37) a. Ho sognato che il mio gatto diventava un mostro spaventoso.
have.PRES.1sg dream-PP that the my cat become-IMPF-3sg a monster dreadful
'I dreamt that my cat turned into a dreadful monster'.
b. Allora, facciamo che tu eri il mago e io la strega.
so make.IMP-1pl that you be.IMPF-2sg the wizard and I the witch
'So, let's pretend that you are the wizard and I am the witch'.

The unreal *imperfetto* is similar to the narrative *imperfetto*, the only difference being that the latter can be replaced by a perfective form, whereas the former cannot because it is used as a counterfactual marker. Counterfactuality is also expressed by the hypothetical *imperfetto* (1-38a), which can be replaced by the past conditional (1-38b):

(1-38) a. Facevi meglio a stare zitto.
do.IMPF-2sg better to be quiet
'You would have done better to keep quiet'.
b. Avresti fatto meglio a stare zitto.

have-COND-2sg do.PP better to be quiet
'You would have done better to keep quiet'.

The *imperfetto* is used in conditional sentences, in the protasis (1-39a), in the apodosis (1-39b) or in both (1-39c). In the protasis, the *imperfetto* replaces the subjunctive; in the apodosis, it replaces the conditional. Although widespread in the spoken language, this use is still forbidden by prescriptive grammars.

(1-39) a. Se lo sapevo, mi sarei comportata diversamente.
if it.ACC know-IMPF-1sg REFL be.COND-1sg behave-PP-Fsg differently
'If I had known, I would have behaved differently'.
b. Se l'avessi saputo, mi comportavo diversamente.
if it.ACC know-PP REFL behave-IMPF-1sg differently
'If I had known, I would have behaved differently'.
c. Se lo sapevo, mi comportavo diversamente.
if it.ACC know-IMPF-1sg REFL behave-IMPF-1sg differently
'If I had known, I would have behaved differently'.

The counterfactual uses of the *imperfetto* metaphorize the past tense as distant from reality, so distant as to be non-actual. This metaphorical distancing from reality also characterizes the use of the *imperfetto* as a pragmatic softener, where the impact of an utterance is softened by projecting a present situation into a vague, unreal past. The softening *imperfetto* when used for polite requests (1-40a) can be replaced by a conditional (1-40b).

(1-40) a. Volevo chiederti un favore.
want-IMPF-1sg ask.you a favour
'I wanted to ask you a favour'.
b. Vorrei chiederti un favore.
want.COND-1sg ask.you a favour
'I would like to ask you a favour'.

To sum up, I would propose that the uses of the *imperfetto* can be analyzed as a network of overlapping features bearing 'family resemblances' (Wittgenstein 1958:66, Rosch &

Mervis 1975:575). Continuous aspect is considered as the unmarked, prototypical meaning of the *imperfetto*: habitual and progressive aspects are less prototypical and represent a more marked form of continuousness. Continousness, progressiveness and habituality are the semantic components of the *imperfetto*, which is generally associated with indeterminacy because of its incompatibility with forms of duration and closed interval. This produces an effect of vagueness that can be exploited for stylistic purposes as well as be metaphorically extended to express counterfactuality and pragmatic softening.

1.2 LEXICAL ASPECT

The range of the term 'aspect' has broadened to include lexical oppositions describing intrinsic temporal properties of the predicate, such as punctual/durative and stative/dynamic. The German term *Aktionsart,* is also employed to indicate these inherent semantic features. The classification of situations according to their inherent semantic properties dates back to Aristotle's *Metaphysics* (1048b) and his distinction between *energeia* (actuality) and *kinêsis* (movement). This dichotomy roughly corresponds to the distinction between atelic and telic, or as it will be explained below, between accomplishments/achievements and states/activities (a detailed analysis of this distinction is provided by Mourelatos 1993).

1.2.1 Lexical aspectual features

The most fundamental semantic properties that classify a situation are static/dynamic, telic/atelic and durative/punctual. The distinction between static and dynamic situations justifies the dichotomy between states and events, the former being static and the latter being dynamic. States represent the most basic situations, being homogeneous and requiring no energy to be sustained, as opposed to dynamic situations, which are "continually subject to a new input of energy" (Comrie 1976:49). The opposition

between stasis and motion is conceptually and perceptually very salient: in fact, Newton's laws of motion are based on this fundamental distinction.

A situation is telic if it leads to a natural endpoint after which the situation no longer holds. If somebody is climbing a mountain, the endpoint is achieved when they reach the top. Conversely, a situation is atelic when the endpoint is not mentioned because irrelevant to the situation in itself. If somebody is swimming, they could do that for hours or stop at any time and it would still be true that they have swum. It was Garey (1957:106) who introduced the terminology 'telic' and 'atelic' but Aristotle first noticed the distinction, which was labelled by Jespersen (1924:272) as 'conclusive/ nonconclusive' and by Dahl (1981:80), following Allen (1966:196), as 'bounded/ nonbounded'. Similarly, the delimited/non-delimited distinction is central in Tenny's (1994) aspectual theory of syntax/semantics interface.

A situation is punctual when it happens instantaneously showing no internal duration, like a roof collapsing, for example. In contrast, a durative situation takes place over a time span, like sleeping or building a house for example.

The intersection of these features produces types of situations that can be grouped into distinct classes. Classifications systems are discussed next.

1.2.2 Classification systems

1.2.2.1 The Vendler/Dowty classification

Based on Ryle (1949) and Kenny (1963), Vendler (1967) devised a fourfold classification of verb types: activities, accomplishment, achievements and states. These categories are distinguished according to their logical entailments, their compatibility with the progressive and their occurrence with certain time adverbials. The time schemata for each one of them are formalized as follow (p. 106):

For activities: *A was running at time t* means that time instant *t* is on *a* time stretch throughout which *A* was running.
For accomplishments: *A was drawing a circle at t* means that *t* is on *the* time stretch in which *A* drew that circle.
For achievements: *A won a race between t1 and t2* means that *the* time instant at which *A* won the race is between *t1* and *t2*.
For states: *A loved somebody from t1 and t2* means that *any* instant between *t1* and *t2 A* loved that person.

Vendler grouped these four classes in two genuses: activities/accomplishments and achievements/states. As highlighted in the formulations above, the former genus allows the progressive whereas the latter disallows it. Although both activities and accomplishments allow the progressive, they are crucially differentiated by entailment patterns: if one is walking and suddenly stops walking, it will still be true that they did walk. Conversely, if one is walking home and suddenly stops doing this, it will not be true that they did walk home. The former is an activity, the latter is an accomplishment: accomplishments, unlike activities, culminate in a natural endpoint. In other words activities are atelic whereas accomplishments are telic.

As to the other genus, states and achievements are different in that the former are durative whereas the latter are punctual. One can own something for a certain period of time, but on the other hand, one dies at a certain moment. The punctual nature of achievements is noticeable when compared to accomplishments in terms of the different entailment patterns of the progressive. If it took somebody one hour to discover the truth, it does not follow that they spent that hour discovering the truth because the discovering itself did not stretch over that period of time. Conversely, if somebody knitted a scarf in one hour, the implication is that they spent that hour knitting that scarf. As to states, their incompatibility with the progressive distinguished them from the other classes. As shown in 1.2.3.1 and 1.3.2, this claim about states and progressives needs to be modified

Vendler's classes are analyzed in terms of the lexical semantic features that characterize them:

(1-41) STATES: static, durative, atelic (like sthg, want sthg)
ACTIVITIES: dynamic durative, atelic (walk, paint)
ACCOMPLISHMENTS: dynamic, durative, telic (walk home, grow up)
ACHIEVEMENTS: dynamic, telic, punctual (die, arrive) [6]

Dowty (1979) adopted and developed this classification. He introduced the notion of agentive/non-agentive subject, he devised diagnostics tests to identify the verb classes and he provided them with a logical structure created through operators like DO and BECOME and connectives like CAUSE. States have the most basic structure: one-argument states, i.e. *exist* have the structure *predicate'* (x); two-argument states, i.e. *know* have the structure *predicate'* (x,y). Activities, like states, are represented as underived predicates, with the operator DO being added only to mark agentivity. For example, the logical structure of the weather predicate *shine* would be *shine'* (x), whereas the logical structure of *work* would be DO (x, [*work'* (x)]). Achievements consist of the operator BECOME, an inchoative marker, followed by a stative predicate. The predicate *die* has the structure BECOME *dead'* (x), whereas *arrive* has the structure BECOME *be-at'* (x,y). Finally, the logical structure of accomplishments combines the logical structure of activities with the one of achievements through the connective CAUSE, which shows a causal link between the two situation types. The predicate *go home* has the structure [DO (x, [*go'* (x)])] CAUSE [BECOME *be-at'* (x, home)].

The logical structures are summarized in the schema below, adapted from Foley and Van Valin (1984:39):

(1-42)

State	*predicate'* (x)
Achievement	BECOME *predicate'* (x)
Activity	DO (x, [*predicate'* (x)])
Accomplishment	ϕ CAUSE ψ (where ϕ is normally an activity verb and ψ an achievement verb)

This schema shows that the logical structure of accomplishments is causative whereas the logical structure of achievements is inchoative. This lexical representation of accomplishments and achievements fails to encode a defining trait of these two classes,

namely the durativity of the former versus the punctuality of the latter. For example, a predicate like *shatter a window* would have the causative structure of an accomplishment but the punctuality of an achievement. Similarly, there are predicates with the inchoative structure of achievements and the durativity of accomplishments.

This is the case of vague predicates such as *cool*, *widen, melt* which involve a gradual change, the result of which is difficult to ascertain. For example, after cooling for one hour, the cake may still not be cold. Although a clear-cut outcome is not evident, the internal structure of these situations shows a development towards an endpoint. The various stages of the cooling process are different in that at a certain moment in a given interval the cake is cooler than the moment before (Bertinetto & Squartini 1995). The telic nature of these predicates manifests itself in their compatibility with forms of completion:

(1-43) a. The cake cooled in one hour.
a'. La torta si è raffreddata in un'ora.

These situations involve a process leading towards a culmination, which can be fully or partially attained, depending on whether the process reaches the final endpoint or else it stops at an intermediate stage. The cake can become cool and once it is cool the process is over, or else it can simply become cooler.

Dowty (1979:88) defined these predicates as 'degree-achievements' because they share with achievements the inchoative meaning of a change into a state, despite the graduality of this change and the vagueness of its goal. However, these predicates fulfill the diagnostics for accomplishments because they are both durative and telic. In fact, the completive adverbial in (1-43) above implies that the cake was cooling during that interval, whereas with achievements the same adverbial is interpreted as ingressive in that it refers to an interval before the onset of the event (1-44).

(1-44) a. The bomb exploded in an hour.
a'. La bomba è esplosa in un'ora.

The implication is that the bomb exploded after an hour and not that the bomb was exploding during that hour. The entailment patterns of the *in X-time* phrase distinguishes accomplishments from achievements. Like accomplishments, but unlike achievements, vague predicates can occur with durative adverbials such as *quickly* and *slowly*:

(1-45) a. The cake cooled slowly.
a'. La torta si è raffreddata lentamente.
b. *The bomb exploded slowly.
b'. *La bomba è esplosa lentamente.

With accomplishments, the progressive focuses on internal stages, whereas with achievements, when not entirely disallowed, the progressive focuses on preliminary stages.

(1-46) a. The cake is cooling.
a'. La torta si sta raffreddando.
b. The bomb is exploding.
b'. La bomba sta explodendo.

In (1-46 a&a') the progressive presents an ongoing process, whereas in (1-46b&b') it presents an event that is about to happen. The tests above show that the so-called 'degree achievements' behave indeed like accomplishments, but in Dowty's (1979) analysis they are considered like achievements because of their inchoative logical structure.

Van Valin & LaPolla (1997) provided accomplishments and achievements with logical structures that capture their different temporal nature. Accomplishments are composed of a state predicate preceded by the logical operator BECOME, which marks changes involving duration. For example the logical structure of the intransitive verb *cool* would be BECOME *cool'* (x). Achievements are composed of a state predicate preceded by the logical operator INGR from 'ingressive', which marks instantaneous changes. For example the logical structure of *explode* would be INGR *exploded'* (x). Moreover, Van

Valin and LaPolla (1997:100) introduced the class of 'active accomplishments' to identify those accomplishments derived from activities, i.e. *sing → sing a song, drink → drink a beer, walk → walk to the park.* Each verb class has a causative version, with an overall of ten lexical aspectual classes:

(1-47)	a. State	John is upset.
	a'. Causative state	The situation upset John.
	b. Activity	The horse galloped.
	b'. Causative activity	The jockey galloped the horse.
	c. Accomplishment	The cake cooled.
	c'. Causative accomplishment	The air cooled the cake.
	d. Active accomplishment	The horse galloped to the stables.
	d'. Causative active accomplishment	The jockey galloped the horse to the stables.
	e. Achievement	The mine exploded.
	e'. Causative achievement	The mine-sweeper exploded a mine.

The causative classes can be identified through a causative paraphrase, as shown below:

(1-48) a. The situation caused John to be upset.

b. The jockey caused the horse to gallop.

c. The air caused the cake to cool.

d. The jockey caused the horse to gallop to the stables.

e. The minesweeper caused the mine to explode.

The logical structures of the lexical aspectual classes represented below are adapted from Van Valin and LaPolla (1997:109):

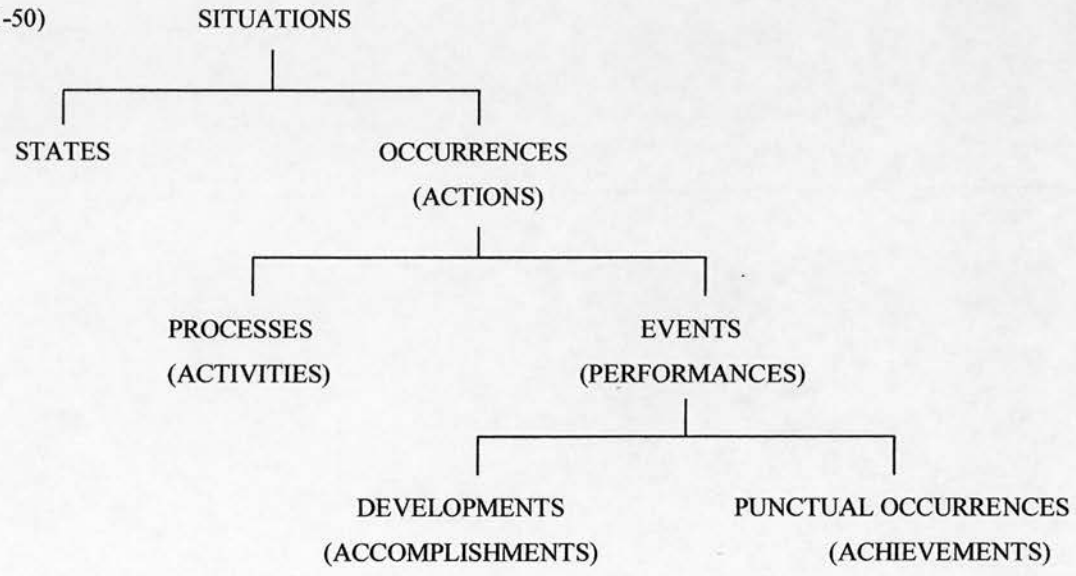
(1-49)	State	*predicate'* (x) or (x, y)
	Activity	*do'* (x, [*predicate'* (x) or (x, y)])[7]
	Accomplishment	BECOME *predicate'* (x) or (x, y)
	Active accomplishment	*do'* (x, *predicate*$_1$' (x, (y))]) & BECOME *predicate*$_2$' (z, x) or (y)
	Causative	α CAUSE β, where α, β are LSs of any type

According to the above lexical representations, accomplishments and achievements are both inchoative, the crucial difference being the temporal nature that spans the change of state, durative for the former (1-47c), instantaneous for the latter (1-47e). The same difference is found in their causative counterparts: causative accomplishments are durative (1-47c') whereas causative achievements are punctual (1-47e').

1.2.2.2 *Alternative classifications*

Mourelatos (1981) revised the Vendlerian classification by proposing the ontological tripartition of states, processes and events. Events are composed by the amalgamation of accomplishments and achievements on the basis of the close relationship between the two classes. Both accomplishments and achievements are telic; moreover, the formers entail the latter in that if somebody ate a sandwich, the implication is that they indeed finished that sandwich. This analysis suggests that there is a dynamic relationship between verb classes and on the basis of this, verb classes can be conflated or one class can become a component of another.

(1-50)



Along this line of reasoning, Parsons (1990) adopted the three-part classification of states processes and events but argued that "Processes are analyzable in terms of Events" (p. 21). In his subatomic semantics, a process like *walk* is a macro-event containing a series of walking micro-events. So, if *John is walking* is true at a given point in time, then *John has walked* should also be true at that time because some of these micro-events culminated before the time in question. The problem here lies in the delimitation of the

subevents that constitute a process. If motional activities like *walk, run* or punctual activities like *knock, jump* can be easily decomposed into cyclic phases, this is more difficult for non-motional activities like *talk, work* because their coarse internal structure can not be easily segmented in micro-events that are representative of the macro-event. In other words, it is hard to imagine how a typical working subevent would be structured like, what are its main components and how it is an instance of the whole process.

Pustejovsky (1995) followed Mourelatos (1981) in adopting a tripartition of states, processes and transitions, and like Parsons (1990) he focused on the subevental structure of situations. He proposed the notion of 'event headedness' (p.72), where a head represents the most prominent subevent of a situation.

"Event headedness provides a way of indicating a type of foregrounding and backgrounding of event arguments. An event structure provides a configuration where events are not only ordered by temporal reference, but also by relative prominence".

According to Pustejovsky (1995), situations are generally composed of two subevents holding a temporal relationship with each other. An accomplishment like *build a house* is left-headed. The two subevents involved are a process and an ensuing state: the former precedes the latter and it is the head because it highlights a process leading to the realization of a state. An achievement like *arrive* is right-headed: again, the two subevents involved are a process preceding a state but in this case the head is the latter subevent because it focuses on the realization of the state.

(1-51) a.

$$\begin{bmatrix} \text{build} \\ \text{EVENTSTR} = \begin{bmatrix} E1 = e1\text{: process} \\ E2 = e2\text{: state} \\ \text{RESTR} = <\alpha \\ \text{HEAD} = e1 \end{bmatrix} \end{bmatrix}$$

b.

$$\begin{bmatrix} \text{arrive} \\ \text{EVENTSTR} = \begin{bmatrix} E1 = e1\text{: process} \\ E2 = e2\text{: state} \\ \text{RESTR} = <\alpha \\ \text{HEAD} = e2 \end{bmatrix} \end{bmatrix}$$

Build in (1-51a) and *arrive* in (1-51b) are composed by the same two subevents, i.e. process and state, aligned according to the same temporal restriction ordering, i.e. the process is prior to the state. The difference lies in the event headedness: in (1-51a) it is the initial subevent, the process, that is headed whereas in (1-51b) it is the final subevent, the state, that is headed.

This analysis points to the non-detachability of process and result in accomplishments (1.2.3.3), in that the result always implies a process. Conversely, in achievements preparatory phases are detachable from the outcome: it is this result state that is foregrounded and this follows from the punctual-telic nature of achievements.

It is not only accomplishments and achievements that entertain a close relationship, but also activities and accomplishments. Activities naturally turn into accomplishments: this dynamic relationship was first noticed by Dowty (1979:61),

"In fact, I have not been able to find a single activity verb which cannot have an accomplishment sense in at least some special context".

If somebody is reading, it is implicit that they are reading something, a book for example, and this process will finish when the book is read. The specification of the entity, a book in this case, is redundant because the telic meaning is implied by the predicate. In this sense, all activities are accomplishments.

Following this argument, McClure (1995) proposed a three-class division of states, activities (processes) and achievements (changes) eliminating accomplishments as a separate class. Based on Dowty (1979), McClure considers states as basic primitives contained in the logical structure of other aspectual classes. According to McClure (1995:104) "changes are defined as pairs of statives, while processes are open-ended sets of changes". A change is bounded: it is composed of two states chronologically ordered. Conversely, a process is unbounded and, following Parsons (1990), it is composed of a series of achievements in its subevental structure. McClure's classification shares with

Parsons's and Pustejovsky's a focus on the internal structure of the situations (more detail in 1.2.5). The basic aspectual structures are summarized below (McClure 1995:104)

(1-52) stative = s, a particular situation
change = c = <s s'>
process = p = {<s1 s2>1 <s3 s4>2...<s_{n-1} s_n>m...}

McClure eliminated accomplishments as a separate class, arguing that accomplishments are a heterogeneous class as to compatibility with diagnostics tests. For example, both *read* and *read a book* are compatible with durative adverbials such as *for X time*:

(1-53) a. John read for an hour.
b. John read a book for an hour.

However, other activity/accomplishments pairs, i.e. *swim* and *swim to the island*, disagree on their acceptability of the same durative adverbial, which is compatible with the activity *walk* but awkward with the accomplishment *swim to the island.*

(1-54) a. John swam for an hour.
b. ? John swam to the island for an hour.

So, according to McClure, *swim* is an activity with an implicit telic meaning and *swim to the island* is an achievement where only a telic reading is allowed. Conversely, *read a book* is an activity, again with an inherent telic meaning.

Van Valin & La Polla (1997) pointed out that the *for X time* test is irrelevant with accomplishments. States and activities accept *for X time*, whereas accomplishments and achievements accept *in X time*. Some accomplishments can occur with *for X time* because of their durative nature.

"Hence the occurrence of *for*-phrases with accomplishments is really redundant and tells us nothing new about accomplishments" (p.96)

A crucial diagnostics in the definition of the accomplishments as a distinct class is their ability to create an imperfective paradox (1.3.2) when occurring with the progressive (Dowty 1979). As shown below, the progressive form of *read a book* and *swim to the island* displays the same logical entailment:

(1-55) a. John is reading a book. (*Therefore John has read a book)
b. John is swimming to the island. (*Therefore John has swum to the island)

Also, *swim to the island* and *read a book* are ambiguous with the adverb *almost*. This ambiguity highlights the durative and telic nature of accomplishments, as *almost* can be related to the event as a whole or to its outcome.

(1-56) a. John almost read a book.
b. John almost swam to the island.

There are two possible readings for these sentences. On one reading, John did not start to read a book/swim to the island; on the other reading, John did not finish the book/ reach the island. The fact *swim to the island* is ambiguous with *almost* goes against its classification as an achievement.

The tests above show that accomplishments represent a distinct class. Several tests are needed for the assignment of a predicate to a given aspectual class because predicates vary in their compliance to the diagnostics that characterizes an individual class. In fact, although predicates share the basic features of the class they belong to, they do not necessarily share all the features of that class or they may instantiate them to various degrees. For example, activities can be agentive or nonagentive and this affects their compatibility with the imperative; achievements can happen instantaneously and therefore are incompatible with the progressive, or else they can be preceded by a preliminary phase and in this case the progressive acquires an ingressive meaning.

In the analysis of my data I will maintain this original quadripartion of verb classes. First, Vendler's classification is the most widespread one, and that allows comparability across

studies avoiding the terminological confusion that arises when different systems are used. Second, the telic/atelic distinction has a crucial influence in the acquisition of tense-aspect morphology and most of this evidence could be lost if accomplishments as a class were eliminated, not to mention the fact that the majority of tokens elicited belongs to this class. Third, since telicity is a fundamental feature, it is worthwhile distinguishing telic predicates that are punctual (achievements) from those that are durative (accomplishments), although this distinction is sometimes difficult.

Each of these four aspectual classes is characterized by predicates with certain lexical semantic features. For this reason, in the subsections that follow, the four classes will be analyzed individually.

1.2.3 Lexical aspectual classes

1.2.3.1 States

States are defined by the sub-interval property (Partree 1984): when a state holds for an interval, it holds for every sub-interval of that interval. So, if the castle belonged to the duke for many centuries, this was true for every moment of all these centuries. States express certain attributes of a participant: location, condition, possession, cognitive and emotional dispositions. *Be* is considered as the most prototypical state. Carlson (1977) divided copular predicates in two classes: individual-level predicates and stage-level predicates, which recall the traditional distinction between necessary and accidental qualities originally formulated by Aristotle. The former class represents permanent features, i.e. *be tall, beautiful, fat*, the latter represent transient ones, i.e. *be angry, hungry, sick*. This distinction, later developed by Dowty (1979) and Goldsmith & Woisetschlaeger (1982) has important linguistic repercussions in that stage-level predicates (1-57b), but not individual-level ones (1-57a), tolerate the progressive:

(1-57) a. *John is being tall.

b. John is being angry.

Of course the same predicate can belong to both classes:

(1-58) a. John is nice.
a'. Gianni è carino.
b. John is being nice tonight.
b'. Gianni fa/sta facendo il carino stasera.

The relationship between states and progressive form is discussed in 1.3.2. The Italian progressive periphrasis is disallowed with states (1.1.2.2) and therefore, the distinction above can be conveyed by *essere* 'be' as opposed to *fare* 'do/make'. The latter de-stativize the predicate making it compatible with the progressive.

The progressive form is intrinsically a marker of dynamism and as such is not usually applicable to states[8]:

(1-59) a. * John is knowing the answer.
a'. * Gianni sta sapendo la risposta.

As a corollary to this, only non-states yields a habitual interpretation when encoded by a present tense:

(1-60) a. John goes to university (* right now).
b. John loves Mary (right now).

The sentence in (1-60a) denotes a habit and does not apply to the here-and-now of a situation; converserly, the sentence in (1-60b) is true also at the moment of speaking. This diagnostics is not available in Italian because the present tense neutralises the progressive/nonprogressive opposition.

Since states are non-agentive by definition (Ross 1972), they are incompatible with all the linguistic makers of agentivity, i.e. imperatives (1-61a&a'), adverbs of volition (1-

61b&b') and control (1-61c&c'), pseudo-cleft sentences (1-61d&d') and *persuade to*-constructions (1-61e&e').

(1-61) a. * Know the answer!
a'. * Sappi la risposta!
b. * John voluntarily knows the answer.
b'. *Gianni sa la risposta volontariamente.
c. * John carefully knows the answer.
c'. * Gianni sa la risposta attentamente.
d. * What John did was know the answer.
d'. * Ciò che Gianni ha fatto, è stato conoscere la risposta.
e. * I persuaded John to know the answer.
e'. * Ho persuaso Gianni a sapere la risposta.

1.2.3.2 Activities

Activities are defined by the size of the interval: if an activity holds at an interval, then the process related to it holds for every sub-interval of that interval, until the interval is too small to be considered an instance of that process. For example, swimming can be viewed as a series of co-ordinated movements of arms and legs, but a person can move an arm and not swimming. This shows that activities are not as homogeneous as states: since they require the presence of an input to occur, the starting point of an activity involves a change from a state. In fact, Parsons (1990) pointed out that if an activity has just started, the part-whole entailment might not hold: if Mary has just started singing, it is doubtful whether she has indeed sung.

Activities can be agentive or non-agentive (Dowty 1979). Agentive activities include motional and non-motional processes (Sorace 2000 – see 1.3.1.1). Non-agentive activities include involuntary processes like emission and weather. Homogeneity is another crucial factor in the definition of activities. A motional process like swimming is more homogenous than a non-motional process like talking: the internal structure of the latter is not easily dividable in subintervals that individually represent the whole process

(McClure 1995). However, weather processes are more homogeneous than motional processes. The former represent a continuum where every subinterval is representative of the process as a whole, whereas the latter are structured in recurrent sub-events every one of which can not be segmented any further without compromising the nature of the process referred to. If somebody lifts a foot it doesn't entail that they are running. Emission processes like stink, and weather processes like snow, display the lowest degree of agentivity and the highest degree of homogeneity, placing them on the borderline between states and activities (see 1.3.1.1).

Predicates involving a punctual-iterative action, i.e. *tap, knock, cough* can also be considered activities on the basis of their dynamic and atelic nature:

(1-62) a. John coughed.
a'. Gianni ha tossito.
b. John knocked on the door.
b'. Gianni ha bussato alla porta.

Although only a single instance of a given situation might be suggested, an outcome or endpoint is not achieved. Smith (1997:3) labels these situations as 'semelfactives' but shifts them to 'multiple-event activities' (p.24) when they involve iteration. Since they satisfy the main diagnostic tests for activities, semelfactives can be classified as activities.

(1-63) a. John coughed all night.
a'. Gianni ha tossito tutta notte.
b. John is knocking on the door.
b'. Gianni sta bussando alla porta.

The compatibility of activities with the imperative is a key factor in determining the degree of agentivity involved:

(1-64) a. * Rain!
a'. * Piova!
b. Run!

b'. Corri!

The occurrence with the progressive shows their dynamic nature:

(1-65) a. It is raining.
a'. Sta piovendo.
b. John is running.
b'. Gianni sta correndo.

Since they are durative, activities can occur with forms expressing duration, i.e. durative adverbials (1-66a&a') and periphrases (1-66b&b'), inceptives (1-66c&c') and egressives (1-66d&d'):

(1-66) a. John talked to his friends for an hour.
a'. Gianni ha parlato con i suoi amici per un'ora.
b. John spent an hour talking to his friends.
b'. Gianni ha passato un'ora a parlare con i suoi amici.
c. John began to talk to his friends.
c'. Gianni ha cominciato a parlare con i suoi amici.
d. John stopped talking to his friends.
d'. Gianni ha smesso di parlare con i suoi amici.

The atelic nature of activities makes them incompatible with forms of completion:

(1-67) a. * John swam in an hour.
a'. *Gianni ha nuotato in un'ora.
b. * It took John an hour to swim.
b'. *Gianni ci ha messo un'ora a nuotare.

1.2.3.3 Accomplishments

A fundamental difference between activities and accomplishments is that the former stop whereas the latter finish (Smith 1997:26). Accomplishments involve successive stages

during which a process moves towards its completion. The non-detachability of a process from its outcome (Dowty 1977) is reflected in the entailment pattern for accomplishments: if an accomplishment occurs at an interval, then the process related to it occurs during the internal stages of that interval. Building a house can be viewed as a process where its successive stages involve advancement to the endpoint, so that each one of them is different from the other as to the degree of closeness to the goal.

Like activities, accomplishments are dynamic and durative and therefore they can occur with the progressive (1-68a&a'), inceptives (1-68b&b') and egressives (1-68c&c').

(1-68) a. John is writing a novel.
a'. Gianni sta scrivendo un romanzo.
b. John began writing a novel.
b'. Gianni ha cominciato a scrivere un romanzo.
c. John stopped writing a novel.
c'. Gianni ha smesso di scrivere un romanzo.

Telicity is the semantic property that distinguishes accomplishments from activities. In fact, accomplishments do allow forms of completion:

(1-69) a. John read 'War and Peace' in a week.
a'. Gianni ha letto 'Guerra e Pace' in una settimana.
b. It took John a week to read 'War and Peace'.
b'. Gianni ci ha messo una settimana a leggere 'Guerra e Pace'.

The facet of non-detachability makes accomplishments ambiguous with the adverb *almost:*

(1-70) John almost read a book.

The sentence above can be interpreted in two ways, focusing on either the initial point or the final one. One reading suggests that John almost start to read a book; the other reading suggests that he read only part of it. This diagnostics is not applicable in Italian

because the adverb *quasi* (almost) tends to be focus on the final part of an event. Thus, (1-71), which represents the Italian equivalent of (1-70), is interpreted as *John almost finished to read a book.*

(1-71) Gianni ha quasi letto un libro

This use of *quasi* as an egressive marker is evident in its frequent occurrence with egressive periphrases, such as *aver quasi finito di*+infinitive ('have almost finished+gerund').

(1-72) Gianni ha quasi finito di leggere un libro.

Accomplishments can be derived from activities: Van Valin and La Polla (1997:111) labelled this subclass "active accomplishments" and divided them in two types: motional predicates and creation/consumption predicates. Activities of these two types shift into accomplishments through the addition of a specified complement that bounds them, i.e. a directional complement or spatial endpoint for motional verbs (1-73) and delimited, specific entities for the creation/consumption predicates (1-74, 1-75).

(1-73) a. John ran in the park. (Activity)
a'. Gianni ha corso nel parco.
b. John ran to the hospital. (Accomplishment)
b'. Gianni è corso all'ospedale.

(1-74) a. John painted beautiful landscapes. (Activity)
a'. Gianni ha dipinto bei paesaggi.
b. John painted a beautiful landscape. (Accomplishment)
b'. Gianni ha dipinto un bel paesaggio.

(1-75) a. John drank wine at the party. (Activity)
a'. Gianni ha bevuto vino alla festa.
b. John drank a bottle of wine at the party. (Accomplishment)
b'. Gianni ha bevuto una bottiglia di vino.

Aspectual type-shifts are further discussed in 1.2.4.

1.2.3.4 Achievements

Achievements are single-staged events denoting an instantaneous change of state, therefore there is no entailment pattern for them: an achievement is true only at the moment of the event. If Mary arrived home at four is true at that moment, it doesn't follow that Mary was arriving home at that moment. Indeed, if Mary was arriving home is true at some moment, it would be a moment earlier than the time indicated.

The punctual nature of achievements is reflected in the ingressive meaning that the progressive acquires when applied to them[9]: the situation described below implies that John is climbing a mountain and will soon reach the top.

(1-76) a. John is reaching the top.
a'. Gianni sta raggiungendo la vetta.

Achievements are compatible with punctual adverbials (1-77a&a') but incompatible with forms of duration (1-77b&b'). They are interpreted as ingressives with forms of completion (1-77c&c'; 1-77d&d'), in that the period of time indicated refers to an interval prior to the event predicated.

(1-77) a. John left at midnight.
a'. Gianni è partito a mezzanotte.
b. *John died for an hour.
b'. *Gianni è morto per un'ora.
c. The building collapsed in just a few minutes.
c'. L'edificio è crollato in pochi minuti.
d. It took John an hour to spot the mistake in the script.
d'. Gianni ci ha messo un'ora a trovare l'errore nel testo.

1.2.4 Aspectual relations and type-shift

The lexical-semantic features of a situation are characterized by the main verb, its arguments and the subject. That aspectual meaning is determined by sentences rather than individual verbs was first stated by Verkuyl (1972), who argued for the compositional nature of aspect. In fact, there are sentences from different lexical aspectual classes that only show a difference in the type of verb argument. For example, the pairs in (1-78a&a', 1-79a&a') and (1-78b&b', 1-79b&b') are showing the atelic/telic distinction:

(1-78) a. John ran in the park. (atelic)
a'. Gianni ha corso nel parco.
b. John ran home. (telic)
b'. Gianni è corso a casa.

(1-79) a. John drank wine. (atelic)
a'. Gianni ha bevuto del vino.
b. John drank a glass of wine. (telic)
b'. Gianni ha bevuto un bicchiere di vino.

The prepositional phrase in (1-78a&a') indicates location, whereas the prepositional phrase in (1-78b&b') indicates direction. This is what Tenny (1994:68) defined as 'the terminus constraint' on indirect arguments. The direct object in (1-79a&a') indicates a mass noun, whereas the direct object of (1-79b&b') indicates a count noun. According to Tenny (1994:11) this is 'the measuring out constraint' on direct internal arguments. Drinking a glass of wine has an explicit endpoint, when the glass is empty; but drinking wine is an atelic event with an arbitrary endpoint.

A similar difference is conveyed by the subjects in (1-80a&a') and in (1-80b&b'):

(1-80) a. Ballons popped for hours.
a'. Palloni sono scoppiati per ore.
b. The balloon popped suddenly.

b'. Il pallone è scoppiato all'improvviso.

The bare plurals in (1-80a&a') make the sentence atelic, whereas the specific subject in (1-80b&b') makes the sentence telic. The sentences also display different adverbials, an important variable in the construal of aspectual meaning. Verkuyl (1987) introduced a distinction between inner and outer aspect, the former concerning the relationship between a verb and its arguments, the latter focusing on the influence of temporal adverbials in determining the aspectual meaning of a sentence. However, Verkuyl (1993) chose to deal primarily with inner aspect and not with outer aspect "in the absence of a sufficiently articulated theory of adverbial modification" (p.12). In the current chapter, type shift constrained by adverbials will not be discussed because it is irrelevant to the data.

Several scholars suggested analogies linking lexical aspectual classes to mass nouns and count nouns (Verkuyl 1972; Mourelatos 1978; Bach 1986). The *tertium comparationis* is the relationship between part and whole. Activities are like mass nouns in that a part properly represents the whole: if a situation like singing is divided into several parts, every one of them is an instance of singing. Similarly, if I cut bread into pieces, each of one of them is still bread. In contrast, accomplishments are like count nouns in that a part does not represent the whole: if I am singing a song and suddenly stop in the middle of it, I cannot say that I have sung that song. Likewise, if you cut a loaf of bread into pieces, each one of them is not a proper instance of the loaf.

Telicity correlates with specificity and quantification. These features are encoded by the arguments of a predicate: one of the crucial differences between telic and atelic situations, is the presence of countable entities in the former, as shown in the examples below:

(1-81) a. Yesterday John played football. (Activity)
a'. Ieri Gianni ha giocato a calcio.
b. Yesterday John played a good football match. (Accomplishment)
b'. Ieri Gianni ha giocato una bella partita di calcio.

In (1-81a&a') the mass noun -football- makes the sentence atelic, whereas in (1-81b&b') the count noun –match- makes the sentence telic.

The relationship between predicates and situations is not one-to-one. The lexical aspectual contour of a predicate represents a conceptualization of real-life situations. Achievements are considered instantaneous not so much because the real-life situations they referred to have no duration (they indeed have one, although very short) but because perceptually, this duration is not relevant and therefore the situation is construed as instantaneous. Also, the same predicate may categorize different dimensions of a given situation. Mourelatos (1981:196) discussed about "the semantic multivalence of state verbs" with sentences such as:

(1-82) a. I understand your point of view. (State)
a'. Capisco il tuo punto di vista.
b. Then suddenly I understood everything. (Achievement)
b'. Poi all'improvviso ho capito tutto.

Here the same predicate, *understand,* is assigned to two different classes. Smith (1997) defined the sentences in (82b&b') as derived-level categorization because they are the result of a type shift: the basic level categorization represents the prototypical meaning of a predicate and in this case, *understand* is prototypically stative.

1.2.5 Internal structure of situations

In 1.2.2.2, it was pointed out that certain classifications of situation types are based on the analysis of the internal, subevental structure of situations (Parsons 1990; Pustejovsky 1995; McClure 1995).

The internal structure of situations has always risen considerable interest. Several scholars have focused on the phasic structure of situations (Bull 1971; Freed 1979;

Binnick 1991). Ideally, every situation consists of a potential initial point or left boundary, a potential duration and a potential final point or right boundary. The left boundary marks an ingressive phase by signalling a change out of a previous situation whereas the right boundary marks an egressive phase by signalling a change into a new situation. These two boundaries delimit the intermediate phase, which represents the situation itself.

Situations are distinguished according to the part of this three-phasic structure they foreground. In activities, i.e. *play,* the intermediate phase is more prominent, whereas the ingressive and the egressive phases are virtually irrelevant. In accomplishments, i.e. play a game of chess, all the three phases are salient. As to achievements, if they imply a preliminary phase, i.e. *reach the top*, they highlight the egressive phase and, to a lesser extent, the intermediate phase; in instantaneous achievements, like *collapse*, the ingressive and egressive phases are merged making the intermediate phase virtually absent. As to states, Binnick (1991: 187) asserted that they are deprived of a phasic structure because "as a state, a situation has no natural boundaries, no inherent structure of onset and culmination". To sum up, a telic situation foregrounds a right boundary, a durative situation highlights an intermediate phase, a punctual situation unites right and left boundaries, and finally in stative situations boundaries are absent.

The analysis of the internal structure of a situation often leads to the analysis of the causal relations between the various phases of which a situation is composed. Adapting the causal chain elaborated by Croft (1986), Smith (1997:22) mapped the five lexical aspectual classes to the causal structure of situations illustrated below:

(1-83) CAUSE SUBJECT ACTION INSTRUMENT OBJECT RESULT

Activity	----------laugh----------
Semelfactive	----------knock at the door------
Accomplishment	----------climb a tree----------
Achievement	----------cure the patient----------
State	----know French

From left to right, the chain is more or less in sequential order. Situations differ in the portion of the chain that they cover. Activities and semelfactives cover the initial stages of the chain whereas achievements cover the final stages because they display a change into a state. Accomplishments stretch throughout the chain, showing that their structure combines the structure of activities with that of achievements. States cover a short final portion of the chain.

1.3 GRAMMATICAL AND LEXICAL ASPECT: THE INTERACTION

Although grammatical and lexical aspects share the same ontological basis (Lyons 1977:706), they should be appropriately distinguished (Comrie 1976; Smith 1983, 1991, 1997; Brinton 1988; Binnick 1991; Klein 1994). Lyons (1977) associated this distinction to more general distinctions such as grammaticalization versus lexicalization and inflectional versus derivational morphology. However, he also emphasized the difficulty in drawing a clear-cut distinction between the two.

Lexical aspect is more covert than grammatical aspect: the former is inherent in the predicate whereas the latter is marked by inflections and periphrases. The two types of information are independent but they interact in creating the aspectual meaning of a sentence. Consider the sentences below:

(1-84) a. At lunchtime, John ate a pizza.
a'. A pranzo, Gianni ha mangiato una pizza.
b. At lunchtime, John was eating a pizza.
b'. A pranzo, Gianni stava mangiando una pizza.
c. At lunchtime, John ate by himself.
c'. A pranzo, Gianni ha mangiato da solo.

(1-84a&a') show a past event with an endpoint – the consumption of a pizza, and the fact that the endpoint was achieved. (1-84b&b') show a phase of the same event, but they are ambiguous on the achievement of the endpoint. Something could have happened while John was eating his pizza preventing him from finishing it off. (1-84c&c') show a past event with no inherent endpoint, and the fact that the event was ended.

The two-component theory elaborated by Smith (1997) is exemplified in the schemata below. The sentence shows an activity with the imperfective aspect. (1-85a) presents the temporal schema for an activity. I and F stand for initial and final endpoints respectively (arbitrary in activities), the dots represent the internal structure of the event. (1-85b) gives a temporal schema for the imperfective aspect: the dots represent the interval of the situation. (1-85c) is a combination of the two schemata, where the slashes indicate an interval of John's eating, without viewing the initial nor the final endpoint.

(1-85) Temporal schema for *John is eating*

a. I.....FArb	(Activity)	John eat
b. ...	(Imperfective)	be+ing
c. I../////..F	(Composite)	John eating

This multi-level scheme keeps the two apectual components independent, whilst displaying their interaction at the same time. In the analysis of my data, two distinct coding tiers will be employed: one for tense-aspect morphology and the other for lexical aspect (see 3.4.2).

1.3.1 Perfective forms and lexical aspect

Smith (1997:70) argued that languages differ in their relationship between perfectivity and stativity. As shown in 1.1.1.1, the English simple past can be considered as a perfective marker. However, when the simple past is applied to stative predicates, the situation referred to can be presented as closed or open. Since the possibility of having an open interval is a prerogative of the imperfective aspect, the simple past shows a

neutralization of the perfective/imperfective distinction, especially when occurring with stative predicates.

(1-86) a. John lived in London ...
b. ...but now he lives in Paris. (closed)
c. ...and he still lives there. (open)

In the sentences above both interpretations are acceptable, whereas in Italian, for example, the *passato prossimo* with a stative predicate only allows the situation to be presented as closed, that is with a change out of a state.

(1-87) a. Gianni ha vissuto a Londra ...
b. ...ma ora vive a Parigi. (closed)
c. ...* e ci vive tuttora. (open)

As to the relationship between non-states and perfective forms, when the latter occur with atelic sentences, as in (1-86), it denotes a terminated situation, whereas when it occurs with telic sentences, as in (1-87), it denotes a completed situation. The difference between 'terminated' and 'completed' is related to the atelic/telic distinction: atelic situations are terminated because they display an arbitrary endpoint, whereas telic situations are completed because they display a natural endpoint.

(1-88) a. John skated on the ice.
a'. Gianni ha pattinato sul ghiaccio.
b. John sneezed.
b'. Gianni ha starnutito.

(1-89) a. John recovered from his illness.
a'. Gianni è guarito.
b. John left for Spain.
b'. Gianni è partito per la Spagna.

There is a prototypical link between perfectivity and telicity. Perfective forms present the situation in its totality, with initial and final endpoints, therefore the lexical aspectual class that most preferably receives perfective marking is represented by telic predicates. Telicity is also a crucial feature in the selection of Italian perfective auxiliary. The influence of lexical aspect on the structure of the *passato prossimo* is discussed below.

1.3.1.1 Lexical aspect and auxiliary selection in Italian

The *passato prossimo* (1.1.1.2) is a periphrastic construction composed of an auxiliary – either *avere* or *essere* – and a past participle. *Avere* occurs with transitive verbs (1-90a) and with a 'type' of intransitive verbs (1-90b&c), whereas *essere* occurs with another 'type' of intransitive verbs (1-91a&b), with reflexive verbs (1-91c), and with the passive (1-91d). When *essere* is selected, the past participle has to agree in gender and number with the grammatical subject of the sentence.

(1-90) a. Maria ha comprato un libro.
have.PRES.3sg buy-PP a book
'Mary bought a book'.
b. Ieri Maria ha lavorato fino a.tardi
yesterday have.PRES.3sg work-PP until late
'Yesterday Mary worked until late'.
c. Maria ha corso nel parco.
have.PRES.3sg run.PP in.the park
'Mary ran in the park'.

(1-91) a. Maria è corsa al parco.
be.PRES.3sg run.PP-Fsg to.the park
'Mary ran to the park'.
b. Maria è arrivata tardi.
be.PRES.3sg arrive-PP-Fsg late
'Mary arrived late'.
c. Maria si è vestita.
REFL be.PRES.3sg dress-PP-Fsg

'Mary got dressed'.

d. Maria è stata arrestata.
be.PRES.3sg be.PP-Fsg arrest-PP-Fsg
'Mary has been arrested'.

Thus, intransitive verbs are split in two sub-classes: one that selects *avere*, called unergative, and another that selects *essere*, called unaccusative. The phenomenon of auxiliary selection has given rise to the unaccusative hypothesis, originally formulated by Perlmutter (1978) within the framework of Relational Grammar and later re-elaborated by Burzio (1981; 1986) within the generativist framework of Government-Binding. The unaccusative hypothesis maintains that the surface subject of unaccusatives is an object at deep structure, unlike the subject of unergatives, which is subject at both deep and surface structure. The subject of unaccusatives behaves like the object of transitive verbs, whereas the subject of unergatives behaves like the subject of transitive verbs.

Languages display various syntactic diagnostics for unaccusativity and auxiliary selection is one of the most common. Research tends to focus on the identification of aspectual constraints on the phenomenon of split intransitivity: the positions are divided between those who analyze it from a purely semantic perspective (Centineo 1986, 1996; Van Valin 1990; Dowty 1991) and those who investigate the interface of syntax and semantics (Tenny 1994; Pustejovky 1995; Levin & Rappaport Hovav 1995; McClure 1995; Sorace 2000).

The aim of this section is to provide a general overview of auxiliary selection in Italian. Centineo (1986, 1996) represents a contribution in that direction with an analysis of auxiliary selection in Italian within the framework of Role and Reference Grammar (Foley and Van Valin 1984). Using the Vendler/Dowty classification (Vendler1967; Dowty 1979) and a theory of pivot/subject choice (Van Valin 1981; Foley and Van Valin 1984), Centineo proposed an analysis of auxiliary selection based on the inherent lexical properties of predicates and on the prototypicality of the subject choice. This is summarized in the table below, adapted from Centineo (1996:265).

(1-92) CONTINUUM OF MARKEDNESS IN PIVOT CHOICE IN ITALIAN

	ACTOR	Transitive	Accomplishments	least MARKED	A
P	[-affected]	Transitive	Activities		V
	-----	Transitive	Achievements		E
I	-----	Transitive	States		R
	-----	Intransitive	Activities		E
V	-----				
	[+affected]	Transitive	Reflexives		E
O	-----	Benefactive	Reflexives		S
	-----	Intransitive	Accomplishments		S
T	-----	Intransitive	Achievements		E
	-----	Intransitive	States		R
	UNDERGOER	Passives			E
Ø		*Si*-impersonal		most MARKED	

This continuum shows a close relationship between the degree of markedness in subject choice, the degree of affectedness and the choice of auxiliary: the least marked subject choice coincides with a non-affected subject and the *avere* selection. Conversely, the *essere* selection correlates with an affected subject, which represents a more marked subject choice. Transitive accomplishments are the most prototypical type of transitive predicate, which echoes an argument proposed by Hopper and Thompson (1980). The actor of transitive accomplishments represents the most unmarked subject choice, whereas the undergoer of passive constructions and the subjectless *si*-impersonal constructions represent the most marked subject choice. On the basis of Centineo's analysis, Van Valin (1990) noticed that *avere* occurs with basic, underived transitive constructions and intransitive activities whereas *essere* occurs with all the rest. This led him to conclude that '*avere* is the distributionally limited or marked auxiliary, and *essere* is the distributionally more general or unmarked auxiliary' (p.256).

As to intransitive verbs, those selecting *avere* are activities whereas those selecting *essere* belong to the other three aspectual classes. The logical structures of states, accomplishments and achievements all share a stative predicate that represents the

affectedness of the subject, as shown in (1-93). Moreover, the past participle agrees in gender and number with the affected subject.

(1-93) a. Maria è andata a scuola. (ACC)
be.PRES.3sg go-PP-Fsg to school
'Mary went to school'.
[DO (Maria, [*go'* (Maria)])] CAUSE [BECOME *be-at'* (Maria, scuola)

b. Maria è svenuta. (ACH)
be.PRES.3sg faint-PP-Fsg
'Mary fainted'.
BECOME *unconscious'* (Maria)

c. Maria è restata a casa. (STA)
be.PRES.3sg stay-PP-Fsg at home
'Mary stayed at home'.
be-at' (Maria, casa)

There are certain intransitive verbs that allow both auxiliaries. In this case, the selection of the auxiliary depends on the type of lexical aspectual class the predicate belongs to, within a given context: *essere* is selected for telic verbs, *avere* for activity verbs. For example, (1-94a) shows an activity performed by an agent, whereas (1-94b) shows an activity resulting into a state where the agent of the activity becomes the affected theme. So, in the case of manner of motion verbs, the addition of a prepositional phrase indicating source or direction, changes an activity into an accomplishment, and this entails an auxiliary shift:

(1-94) a. Maria ha corso nella gara dei 100 metri. (ACT)
have.PRES.3sg run.PP in.the race of.the metres
'Mary ran in 100-metre race'.
DO (Maria [*run'* (Maria)])

b. Maria è corsa all' ospedale. (ACC)
be:PRES-3sg run.PP-Fsg to.the hospital
'Mary ran to the hospital'.
[DO (Maria, [*run'* (Maria)])] CAUSE [BECOME *be-at'* (Maria, ospedale)]

Not all manner of motion verbs shift into accomplishments in the presence of a prepositional phrase indicating source or direction:

(1-95) a. Maria ha nuotato nell' oceano.
have.PRES.3sg swim-PP in.the ocean
'Mary swam in the ocean'.
b. Maria ha nuotato fino.all' isola.
have.PRES.3sg swim-PP as.far.as.the island
'Mary swam to the island'.

Centineo claims that verbs like *nuotare*, *camminare* and *guidare* are activities that cannot shifted into accomplishments: in fact these verbs can only occur with a prepositional phrase introduced by *fino a* ('as far as'), which indicates the extent of the activity in question. In this sense a predicate like (1-95b) can be considered as a bounded activity. However, it should be noted that the said predicate satisfies the diagnostics for accomplishments, namely the imperfective paradox (1-96a), and the compatibility with completive adverbials such as *in an hour* (1-96b)

(1-96) a. Maria sta nuotando fino.all' isola ⟶
be-PRES-3sg swim-GER as.far.as.the island
'Mary is swimming to the island'.
⟶ Maria non ha nuotato fino.all' isola.
NEG have.PRES.3sg swim-PP as.far.as.the island
'Mary has not swum to the island'.
b. Maria ha nuotato fino.all' isola in un'ora.
have.PRES.3sg swim-PP as.far.as.the island in an hour
'Mary swam to the island in an hour'.

McClure (1995:272) argued that *nuotare fino all'isola* and *correre al negozio* are both achievements, the difference being that the former is derived from an activity whereas the latter is derived from a state. He proposed that *correre* is 'an unaccusative state which then finds itself in achievement and activity environments' (p.269). This claim is supported by the occurrence of *correre* with idiomatic expressions such as:

(1-97) a. Le nostre vite sono corse parallelamente.
the our lives be.PRES.3pl run.PP-Fpl parallelly
'Our lives ran parallel'.
b. Come è corso il tempo!
how be.PRES.3sg run.PP the time
'How time has flown by!'.
c. È' corsa voce che...
be.PRES.3sg run.PP-Fsg rumour that
'The rumour spread that...'

According to McClure the idiomatic sentences above are stative. However, it could be plausibly argued that they are indeed activities, although through metaphorical extension. The stative component in *correre al negozio* emerges with durative adverbials such as *for an hour*.

(1-98) a. ??Maria ha nuotato fino.all' isola per un'ora.
have.PRES.3sg swim-PP as.far.as.the island for an hour
'*Mary swam to the island for an hour'.
b. Maria è corsa al negozio per un'ora.
be.PRES.3sg run.PP-Fsg to.the shop for an hour

The sentence in (1-98a), although rather odd for some native speakers, implies that the activity is reiterated during that interval, i.e. the subject swam to and from the island for an hour. Conversely the sentence in (1-98b) implies that the state in which subject finds herself obtains for that interval, i.e. the subject was at home for one hour.

It could be argued that, in terms of linguistic acceptability, **Maria è nuotata fino all'isola* is not as bad as **Maria è lavorata fino a tardi.* Thus there are certain types of predicates that resist auxiliary shift whereas there are others that display more flexibility. This is, in a nutshell, the gradient approach proposed by Sorace (2000). Based on typological and acquisitional data this analysis provides a general explanation of auxiliary selection behaviour in Western European languages.

Sorace focused on monadic, non-reflexive intransitive verbs and suggested that within the subclass of unaccusatives, the most prototypical ones systematically select BE, and within the subclass of unergatives, the most prototypical one systematically select HAVE. BE is strongly associated with telic changes whereas HAVE is strongly associated with agentive unaffecting processes. Unaccusatives denote transitions and states and are defined by the interaction of the notions telic/atelic, dynamic/static, and concrete/abstract (this one is of secondary importance). Unergatives denote processes and are defined by three factors ordered by importance: agentivity, affectedness of the subject, homogeneity of the process. According to this analysis, gradience in the defining lexical-semantic properties of these verbs influences the consistency of their syntactic behaviour as unaccusatives or unergatives. This gradience generates a hierarchy of auxiliary selection. At the one end of this hierarchy there are core unaccusatives, at the other end, core unergatives, and moving towards the centre there are more peripheral verbs displaying variation in their auxiliary choice. The auxiliary selection hierarchy is illustrated below (Sorace 2000:863):

(1-99) AUXILIARY SELECTION HIERARCHY

Change of location	selects BE (least variation)
Change of state	
Continuation of a pre-existing state	
Existence of state	
Uncontrolled processes	
Controlled processes (Motional)	
Controlled processes (Non-motional)	selects HAVE (least variation)

The preference for a given auxiliary is strongest with verbs belonging to the extreme ends of the hierarchy: these are the two distinct cores. It gradually becomes weaker towards the centre of the hierarchy: non-core verbs are subject to variation with regard to auxiliary selection.

(1-100) a. Il treno è /*ha arrivato in.anticipo. (Change of location)
the train be.PRES.3sg / have.PRES.3sg arrive-PP early
'The train arrived early'.

b. Gianni è / *ha caduto dal balcone. (Change of location)
be.PRES.3sg / have.PRES.3sg fall-PP from.the balcony
'John fell from the balcony'.

c. Il geranio è / ha fiorito. (Change of state)
the geranium be.PRES.3sg / have.PRES.3sg blossom-PP
'The geranium has blossomed'.

d. Il geranio è / *ha cresciuto a.dismisura. (Change of state)
the geranium be.PRES.3sg / have.PRES.3sg grow-PP out.of.all.proportion
'the geranium has grown out of all proportion'.

e. Il film è / ha durato due ore. (Continuation of a pre-existing state)
the film be.PRES.3sg / have.PRES.3sg last-PP two hours
'The film lasted two hours'.

f. Gianni è / *ha rimasto a casa. (Continuation of a pre-existing state)
be.PRES.3sg / have.PRES.3sg remain.PP at home
'John remained at home'.

g. Il maniero è / ha appartenuto al duca. (Existence of a state)
the manor be.PRES.3sg / have.PRES.3sg belong-PP to.the duke
'The manor belonged to the duke'.

h. Il concerto è / *ha piaciuto a tutti. (Existence of a state)
the concert be.PRES.3sg / have.PRES.3sg please-PP to everybody
'Everybody liked the concert'.

Sorace (2000:870) maintains that:

'there is a hierarchy among verbs denoting transition and state, which range from verbs of change of location, which express telicity inherently and overtly, to verbs that imply an eventual end-state of the change process, to verbs that include an implicit negation of change, finally to verbs that denote simple existence of a state'.

The variation displayed by these verbs correlates with their position on the hierarchy: change of location verbs are the most impervious to auxiliary shift and systematically select BE. An equal imperviousness is shown by non-motional processes in their selection of HAVE. Thus, prototypical activities like *lavorare* (1-101a) and *giocare* (1-101b), characterized by a non-affected subject, invariably select *avere*. There appears to be a correlation between affectedness and auxiliary shift: the more affectedness a process

displays, the more susceptible it is to shifting auxiliary. In fact, the subject of motional processes such as *rotolare* (1-101c) is more affected than the subject of non-motional processes. Motional processes are more prone to auxiliary shift and uncontrolled processes even more so: the latter group exhibits the highest degree of affectedness, including processes such as involuntary reactions (1-101e), bodily functions (1-101f), emissions (1-101g) and weather (1-101h).

(1-101) a. Gianni ha /*è lavorato sodo. (Non-motional process)
have.PRES.3sg / be.PRES.3sg work-PP hard
'John worked hard'.

b. Gianni ha / *è giocato a calcio. (Non-motional process)
have.PRES.3sg / be.PRES.3sg play-PP PREP football
'John played football'.

c. Il pallone ha / è rotolato molto lentamente. (Motional process)
the ball have.PRES.3sg / be.PRES.3sg roll-PP very slowly
'The ball rolled very slowly'.

d. Gianni ha / *è camminato fino.al ponte. (Motional process)
have.PRES.3sg / be.PRES.3sg walk-PP as.far.as.the bridge
'John walked to the bridge'.

e. Il camion ha / è sbandato sul ghiaccio. (Uncontrolled process)
the truck have.PRES.3sg / be.PRES.3sg skid-PP on.the ice
'The truck skidded on the ice'.

f. Gianni ha / *è sudato freddo. (Uncontrolled process)
have.PRES.3sg / be.PRES.3sg sweat-PP cold
'John was in a cold sweat'.

g. Il telefono ha / è squillato una.volta. (Uncontrolled process)
the telephone have.PRES.3sg / be.PRES.3sg ring-PP once
'The telephone rang once'.

h. Ha / è piovuto tutto il giorno. (Uncontrolled process)
have.PRES.3sg / be.PRES.3sg rain-PP all the day
'It rained all day'.

Most interestingly, this analysis is supported by acceptability judgements elicited from native and non-native speakers of Italian with the use of the magnitude estimation technique (Sorace 1993; 1995a; 1995b), which measures the strength of preference of

grammatical sentences over ungrammatical ones (Bard, Robertson and Sorace 1996). Native speakers and non-native speakers would share the same sensitivity to the hierarchy. Native speaker's intuitions are consistent with the hierarchy in that there is a correlation between the position of a verb on the hierarchy and the strength of preference for the canonical auxiliary. Non-native speakers' acquisition of auxiliary selection appears to start from the core verbs and gradually spread to the more peripheral positions. According to Sorace, the acquisition of *essere* starts from change of location verbs such as *andare*, whereas the acquisition of *avere* starts from non-motional activities such as *dormire*. In particular, verbs indicating change of location elicit stronger preferences for *essere* across proficiency levels, whereas verbs indicating non-motional activities elicit stronger preferences for *avere*.

To conclude, this section shows how lexical aspect influences the choice of auxiliary in the formation of the *passato prossimo*. The study presented in this dissertation deals with the role of lexical aspect in child L2 acquisition of tense-aspect forms: among these, the *passato prossimo*, of which auxiliary selection represents an integral part. Therefore, I will investigate whether in the interlanguage of English-speaking children learning Italian *essere* is strongly associated with prototypical unaccusatives, such as accomplishments and achievements indicating change of location. However, I would also consider how language transfer affects this association, since the L2 Italian children in question are native speakers of English and therefore are not familiar with auxiliary selection in compound tenses. Language transfer is discussed in the next chapter.

1.3.2 Imperfective forms and lexical aspect

Italian and English differ in the portion of imperfectivity they grammaticalize. Unlike the progressive, the *imperfetto* covers the whole imperfective area. With durative predicates, imperfective forms shows the internal structure of a predicate, focusing on the dynamism of the process:

(1-102) a. John is skating on the ice. (Activity)

a'. Gianni pattinava sul ghiaccio.

b. John was painting his bedroom. (Accomplishment)

b'. Gianni pitturava la sua stanza.

The logical entailment of the progressive form (and of imperfective forms in general) with an accomplishment produces 'the imperfective paradox' (Dowty 1979:133): that John was painting his room does not entail that he painted it. This is one of the tests distinguishing accomplishments from activities, since John was skating on the ice entails that he indeed skated on the ice. Dowty (1979) explained this phenomenon by introducing the notion of 'inertia worlds' (p.148):

"- these are to be thought of as worlds which are exactly like the given world up to the time in question and in which the future course of events after this time develops in ways most compatible with the past course of events" (p. 148).

These possible future worlds where the event reaches its natural endpoint are linked to the real world: the possible worlds and the real world coincide at all moments prior to a given time and after that the possible worlds represent a natural evolution of the previous situation. Although John might have interrupted the process of painting his bedroom, it is still possible to imagine a world where the final result of this process is attained. However, the continuation of a progressive situation can not be assumed, as shown below:

(1-103) a. John was painting his bedroom when suddenly he died of a heart-attack..

a'. Gianni pitturava la sua stanza quando all' improvviso è morto d'infarto.

This led Parsons (1990) to treat the progressive as a stativizing operator: any lexical aspectual class in the progressive is turned into stative because the subatomic structure of the progressive contains the stative predicate HOLD.

"The proposed analysis is immune to "paradoxes" of the imperfective kind, since saying of an event that it holds at a given time does not imply that it culminates at that or any other time" (p. 171)

This analysis points to the identification of progressivity with stativity[10]: since states are inherently progressive the progressive marker is redundant, which explains why the progressive does not apply to stative predicates. However, the progressive form does indeed occur with states, especially contingent ones (1-104).

(1-104) a. John was feeling ill.
b. John was lacking the necessities of life.

Following Carlson (1977) and Dowty (1979 – see 1.2.3.1), Goldsmith and Woisetschlaeger (1982) distinguish between a structural situation and a phenomenal situation. The former is permanent and occurs in the simple present, the latter is transient and occurs in the progressive. Therefore, it is the progressive that distinguishes stage-level predicates (1-105b) from individual-level predicates (1-105a):

(1-105) a. John is silly.
b. John is being silly tonight.

When applied to predicates of position and location, the progressive form indicates temporariness: the oddness of (1-106c) derives from the permanence of the situation described.

(1-106) a. The box is standing outside the shop.
b. The hill stands behind the lake.
c. ??The hill is standing behind the lake.

In the presence of an animate subject postural predicates could also be considered as activities. In fact, not only is there an element of volitional control involved but also the diagnostics for activities are satisfied, as shown below by the compatibility of the predicate with the progressive form (1-107a), the pseudo-cleft construction (1-107b) and the imperative (1-107c).[11]

(1-107) a. John was standing outside the shop.
b. What John did was standing outside the shop.
c. Stand outside the shop, please!

The progressive endows states with the dynamism that is typical of activities. In what Smith (1997:174) defined as a 'marked aspectual choice', states marked by the progressive possess a vivid contour that is missing in their usual occurrence with simple forms.

(1-108) a. We are really wanting to solve this problem.
b. The children are hating drama classes.
c. I am not liking any of this.

These sentences show the de-stativization of stative predicates by means of the progressive. This goes against the claim that adding a progressive marker to a stative predicate is redundant because progressives and states are equivalent (Vlach 1981; Parsons 1990).

The relationship between states and progressives is a complex one. Traditionally, stativity and progressivity are considered intrinsically incompatible (Vendler 1967; Comrie 1976; Lyons 1977). If this is true for the progressive periphrasis in Italian (1.1.2.1), the progressive in English displays more variation and flexibility. The relationship with stativity is an area where the progressive and the *imperfetto* diverge. The *imperfetto* is applicable to all states, whereas the progressive form is restricted to contingent states, and with other states it is considered as a marked choice.

(1-109) a. La coperta giaceva ai piedi del letto.
the blanket lie-IMPF-3sg at.the feet of.the bed
'The blanket lay at the foot of the bed'.
b. La collina si ergeva dietro il lago.
the hill REFL stand-IMPF-3sg behind the lake
'The hill stood behind the lake'.
c. Gianni voleva la macchina nuova.
want-IMPF-3sg the car new

'John wanted the new car'.

d. A Gianni piaceva l' opera.
to please-IMPF-3sg the opera
'John liked opera'.

Vendler (1967) grouped states and achievements in the same genus because they both disallow the progressive form (1.2.2.1). As shown above, the progressive form can occur with states, although with restrictions. As to achievements, since their being punctual implies a lack of an internal structure, they seem at odds with the durative nature of the progressive. Certain achievements are awkward with the progressive, namely those achievements denoting an instantaneous change of state or condition without preliminaries. Ryle (1949:149) defined these as 'purely lucky achievements':

(1-110) a. ? John was finding his keys.
b. ? John was recognizing his old friends.

This type of achievements is only compatible with the *imperfetto* when the meaning is habitual[12]:

(1-111) a. Gianni trovava spesso le chiavi sotto lo zerbino.
find-IMPF-3sg often the keys under the doormat
'John often found his keys under the doormat'.
b. Anche dopo molti anni, Gianni riconosceva sempre i.suoi vecchi amici.
even after many years recognize-IMPF-3sg always his old friends
'Even after many years, John always recognized his old friends'.

When the progressive and the *imperfetto* occur with an achievement composed by a preparatory phase, they acquire an imminential meaning because the focus is on the stages preceding the culmination of the event:

(1-112) a. The team was winning the match.
a'. La squadra vinceva la partita.
b. John was leaving for India.
b'. Gianni partiva per l' India.

To sum up, the focus of imperfectivity is on the internal temporal structure of a situation that is perceived as open: since the endpoints are not included, the view can only be partial. It is for this reason that imperfective forms naturally privilege durative, atelic predicates. However, the progressive and the *imperfetto* diverge as to the share of the durative-atelic area that they are primarily associated with. In fact, there is a prototypical link progressive-activities and *imperfetto*-statives. The *imperfetto* can be considered as the prototypical marker of stativity because statives are compatible with the *imperfetto* but not with the periphrases that optionally replace it (1.1.2.2).

These prototypical links will be next considered from an acquisitional perspective (2.1.2; 2.2.1.2; 2.2.2.3) and then investigated in the bi-directional study.

CONCLUSION

The theoretical overview of tense-aspect presented in this chapter constitutes the general framework relevant to the understanding of the empirical data presented in my study. First two aspectual dimensions have been distinguished, i.e. grammatical aspect and lexical aspect, then their interaction has been discussed. The English and Italian tense-aspect systems have been illustrated and compared.

Grammatical aspect represents a viewpoint on the situation and is marked by the verb morphology of a language. Grammatical aspect has been primarily analyzed in its perfective and imperfective specifications and the linguistic forms that encode them have been illustrated: the simple past for both the perfective and the imperfective, the *passato prossimo* for the perfective, the progressive form and the *imperfetto* for the imperfective. Compared to Italian, imperfectivity in English is more circumscribed, the obligatory overt distinction being between progressive and non-progressive aspect. The acquisitional implications for this asymmetry of the imperfective aspect in English and Italian are discussed in the next chapter.

Lexical aspect consists of the inherent semantic traits of a predicate and ultimately of the situation it represents: static/dynamic, telic/atelic, punctual/durative. On the basis of these properties, situations are grouped into classes: the Vendler/Dowty classification and alternative classifications have been discussed. The four main lexical aspectual classes and the linguistic diagnostics that identifies them have been considered. These are: states, activities, accomplishments and achievements. The relationship between classes is not a rigid one and, in fact, what looks like the same verb can describe different situation types. Also, each situation type can be analyzed in terms of its internal structure.

Finally, the interaction of grammatical and lexical aspect has shown how perfective and imperfective forms combine with the lexical aspectual classes. Prototypical links have been individuated, namely simple past/*passato prossimo*-telic predicates, progressive-activities and *imperfetto*-statives. Furthermore, as to the *passato prossimo*, the morpheme of the past participle is marked for affectedness of the subject, which is associated to the selection of *essere* as perfective auxiliary. The acquisitional importance of these prototypical links, which is discussed in the next chapter, is at the basis of the empirical study presented later.

NOTES

[1] Throughout the dissertation, the terms *passato prossimo* and compound past will be used interchangeably; the same applies to *imperfetto* and imperfect.

[2] In this chapter, the term 'situation' is used in a general, neutral sense to cover both states and events.

[3] Several native speakers of English and several other native speakers of Italian checked my intuitions about the sentences presented in this chapter.

[4] Brinton (1988) disagrees with the claim that habituality is a subclass of imperfectivity because habitual situations can also be viewed perfectively, i.e. as a whole, without considering their internal structure. This claim is supported by the optionality of the periphrasis *used to* as well as by the expression of habitual meaning conveyed by both perfective and imperfective forms.

(i) As a child, John wore glasses.
(ii) As a child, John was wearing glasses.

Even in Italian, where the perfective/imperfective distinction is fully grammaticalized, habituality can be conveyed by the *imperfetto*, an imperfective marker (iii), as well as by perfective markers such as the *passato prossimo* and the *passato remoto* (iv):

(iii) Da bambino, Gianni portava gli occhiali.
(iv) Da bambino, Gianni ha portato/portò gli occhiali.

The difference between (iii) and (iv) is that in the latter situation the interval is closed whereas in the former situation the interval is open. In Italian, the imperfective nature of habituality can be highlighted by the insertion of the adverbial *già* 'already', implying that the situation continues beyond the reference time (Bertinetto 1997). As shown in (v), this is certainly incompatible with the notion of perfectivity, where the situation is viewed in its totality i.e. with initial and final endpoint.

(v) *Da bambino, Gianni ha portato già gli occhiali.
(vi) Da bambino, Gianni portava già gli occhiali.

[5] Of course this sentence could be rendered perfectively both in Italian and English.

(i) La notte scorsa Maria ha ballato con Gianni.
(ii) Last night Mary danced with John.

As pointed out earlier in this chapter, aspectual choices are primarily a matter of personal choice in that it up to speaker to decide whether a situation should be expressed perfectively or imperfectively.

[6] Smith (1991) added a fifth one: *semelfactives* like jump, knock and cough for example. These predicates are dynamic, atelic and punctual.

[7] According to this analysis, *do'* is a 'generalized activity predicate' (Van Valin & LaPolla 1997:103) and not an agentive marker.

[8] As will be shown in 1.3 the relationship between stativity and progressiveness is more complex.

[9] Not all achievements are compatible with the progressive form (see ex. 1-107)

[10] Another link between stativity and progressivity resides in possibility of replacing the progressive with a locative paraphrase, the stative meaning of which is conveyed by the presence of the copula:

(i) John is praying > John is at prayer.
(ii) The train is moving > The train is in motion.

Notice, however, that the correspondence between a progressive and its periphrasis is not one-to-one: John is at work can mean both a) John is working and b) John is at his place of work. Moreover, the addition of a dynamic adverb to both the progressive and its periphrasis shows that the two do not really match:

(iii) John is working intensely.
(iv) ? John is at work intensely.

[11] In the coding and analysis of the bi-directional data, postural predicates with an animate subject will be considered as activities and postural predicates with inanimate subjects will be considered as states.

[12] The habitual meaning of the *imperfetto* is available to all lexical aspectual classes:

(i) Da bambina, Maria credeva nelle fate. (STA)
PREP child believe-IMPF-3sg in.the fairies

'As a child, Mary believed in fairies'.

(ii) Gianni giocava a calcio tutti i giorni. (ACT)
play-IMPF-3sg PREP football all the days
'John played fooball every day'.

(iii) Ogni primavera, le rondini costruivano il nido. (ACC)
every spring the swallows build-IMPF-3pl the nest
'Every spring, the swallows built their nest.'

(iv) Gianni perdeva spesso il treno. (ACH)
miss-IMPF-3sg often the train
'John often missed the train'.

CHAPTER 2

THE ACQUISITION OF TENSE-ASPECT MORPHOLOGY

INTRODUCTION

This chapter presents two main sections about the first and second language acquisition of tense-aspect, providing cognitive-functional accounts relevant to the general approach of this dissertation, which resides within framework of the 'aspect hypothesis' (Shirai 1991; Shirai & Andersen 1995; Andersen & Shirai 1996). The first section (2.1) starts with an introductory background in first language acquisition, then concentrates on empirical findings from child English (2.1.1) and child Italian (2.1.2). Similarly, the second section (2.2) outlines the leading approaches to the study of temporality in second language acquisition before illustrating findings from adult second language acquisition (2.2.1) in English (2.2.1.1) and Italian (2.2.1.2).

In between first language acquisition and adult second language acquisition stands child second language acquisition. After a definition of its scope (2.2.2), child L2 studies in English (2.2.2.1) and Italian (2.2.2.2) are reviewed and compared. The fact that child L2 learners have already acquired a first language raises the issue of language transfer: its impact on children's interlanguage is analyzed in 2.3.1. However, the few studies addressing the role of language transfer in the second language acquisition of tense-aspect have been conducted with adult learners (2.3.2). Since this dissertation intends to show the effects of language transfer on child second language acquisition of tense-aspect morphology, the design of the longitudinal-bidirectional study geared towards that purpose is discussed in (2.3).

2.1 FIRST LANGUAGE ACQUISITION

Based on cross-linguistic data on language acquisition, Slobin (1985a) argued that the child is endowed with an information-processing system, the Language-Making Capacity, that employ a set of cognitive strategies, the Operating Principles, to build a universal Basic Child Grammar (BCG).[1]

BCG is like 'an opening wedge to the acquisition of language-specific grammatical distinctions, without at first biasing the child to any particular language' (p.1184). This also applies to the acquisition of temporality. BCG distinguishes between two basic temporal perspectives: result versus process, The result perspective indicates completion and is grammaticalized by a perfective, a perfect or a past tense. The process perspective indicates non-completion and is grammaticalized by an imperfective or a progressive.

The result perspective is particularly prominent: forms such as *all gone* and *all done* emerge during the one-word stage. Child language aims at iconic transparency of form-meaning relations (Slobin 1985b). For example, initial past marking appears to be used by the child 'to comment on an immediately completed event that results in a visible change of state of some object' (p.1181). Acquisitionally, this represents the prototypical meaning of the past, which emerges with telic-punctual verbs such as *fall*, *drop* and *break* (Brown 1973; Taylor 1995).

This change of state is foregrounded when the result perspective is taken on the Manipulative Activity Scene, which characterizes the prototypical transitive event (Slobin 1981, 1985a). The Manipulative Activity Scene consists of a volitional agent carrying out a change of state or location in a patient through physical activity or contact. Initially, the Manipulative Activity Scene is represented by the child affecting a physical entity through manipulation. Thus, the prototypical subject is an agent and the prototypical object is a patient: according to Gropen et al. (1991) affected entities are linked to direct object position through 'semantic bootstrapping' (Pinker 1989).

In some languages the affected entity can display morphological marking. For example, in Antinucci & Miller (1976), L1 Italian children make the past participle agree in gender and number with the object of a transitive verb. This morphological agreement indicates a result perspective on the patient, which is thus treated like an affected entity. However, in child Italian, gender and number marking is also applied to the past participles of unaccusatives, which indicate an affected subject (2.1.2). Since prototypical subjects coincide with affecting agents, affected subjects can be considered as more marked (see 1.3.1.1 for a discussion on *essere* verbs and affectedness).

Principles similar to Basic Child Grammar can be found in the formation of creoles studied by Bickerton (1981) who reinterpreted the findings in Brown (1973) and Antinucci & Miller (1976) as evidence for his Language Bioprogram Hypothesis. A pidgin becomes a creole when children exposed to the pidgin acquire it as their native tongue. Thus, creoles are new native tongues that children create on the basis of the pidgin spoken by their parents. Since even unrelated creoles share basic common features, Bickerton argued that this is because certain linguistic categories are bioprogrammed. As to the acquisition of tense-aspect morphology, he claimed that children's mind is genetically equipped with the ability to make distinctions such as punctual/non-punctual, state/process, and specific/nonspecific.[2] According to Bickerton, Antinucci & Miller (1976) show the operation of an innate "punctual/non-punctual" distinction, claiming that the children use past marking to encode punctuality rather than tense. Similarly, in Bickerton's analysis, Brown (1973) would show that children are predisposed for the state-process distinction because the progressive form is never overextended to statives, although overgeneralization errors such as the regularization of the irregular past are very frequent.

Weist et al. (1984) labelled the claims in Antinucci & Miller (1976) and Bloom et al. (1980) as 'defective tense hypothesis' and disputed the principle that the earliest verb morphology in child language only encodes aspect, not tense, due to an undeveloped concept of past time. Applying Vendler's classification to longitudinal and cross-sectional data on the acquisition of Polish, Weist and his colleagues showed that the

earliest instances of past tense inflections are used deictically. Tense and aspect are grammaticalized in Polish and children are able to mark both of them from the start. (2-1a) and (2-1b) show the ability to contrast perfective with imperfective in the past[3]:

(2-1) a. wkładała / włożyła (Martha 1;7-1;9)
put.in-PASTIMPF-3SG-FEM / put.in-PASTPERF-3SG-FEM
'she was putting in' / 'she put in'

b. robiłam / zrobiłam (Paulina 1;9-1;11)
do-PASTIMPF-1SG / do-PASTPERF-1SG
'I was doing' / 'I did'

Importantly, all the children, even the younger ones, encode activities, such as *fly* (2-2a) and *swim* (2-2b), with the past imperfective.

(2-2) a. leciał samolot (Martha 1;7)
fly-PASTIMPF-3SG-MASC plane
'The plane was flying'

b. plywała (Bartosz 1;8)
swim-PASTIMPF-3SG-FEM
'She was swimming'

Weist et al. (1984) suggested that children take perspectives on a situation, viewing it from either an internal perspective or an external one.

'When a situation is viewed internally, features like incomplete, durative and continuous are salient and viewing the situation externally, the salient features are completed, punctual and discontinuous.' (p.370)

Based on Weist et al. (1984), Bowerman (1985) argued *contra* Slobin (1985a) that from the beginning child grammar is more influenced by the 'semantic structure of the input language' (p.1305) rather than by the conceptual distinction between result and process.

However, as Anderson (1989) pointed out, what Weist et al. (1984) attacked was an absolute version of the defective tense hypothesis that is too strong to be realistic. According to this all-or-nothing version, only telic verbs receive past-tense inflection, a tense distinction will be redundant and only accompany an aspectual distinction, only references to immediate past situations will be made (Weist et al. 1984, p.348). Anderson

(1989) and Bloom & Harner (1989) reanalyzed the tables in Weist et al. (1984) and showed that the children's verb morphology is biased by lexical aspectual features of the predicate. In fact, the overall count of the utterances revealed a paucity of past perfective inflections with atelic verbs; in the youngest age group (1;8), the majority of telic predicates were inflected in the past perfective whereas less than 10% of atelic predicates received past perfective inflection. Therefore, a relative version of the defective tense hypothesis may still hold true (Andersen 1989). This is the 'aspect hypothesis' (Shirai 1991; Andersen & Shirai 1994), which claims that in early acquisitional stages verb morphology is highly influenced by lexical aspect.

Shirai (1991) interpreted the findings in Antinucci & Miller (1976) and Bloom et al. (1980) as consistent with the predictions of the aspect hypothesis (Shirai 1991:9-10):

(2-3) a. Past/perfective morphology emerges primarily with achievements and accomplishments later extends to activities and finally to statives.
b. In languages encoding the perfective-imperfective distinction, the imperfective past emerges later than the perfective past, and the imperfective past appears with statives, extending next to activities, then to accomplishments and finally to achievements.
c. In languages encoding progressive aspect, progressive morphology begins mostly with activities and then extends to accomplishments and achievements.
d. Progressive morphology is not incorrectly overextended to statives.

These predictions pinpoint the acquisitional relevance of the prototypical links discussed in 1.3.1and ff.: simple past/*passato prossimo*-telics, *imperfetto*-statives and progressive-activities. As will be shown in 2.2 and ff., these predictions have also been applied to second language acquisition, although the prediction in (3d) is still controversial. According to Shirai & Andersen (1995), the children's morphological development is shaped by input and prototypes. Since a prototype is the best exemplar of a category (Rosch 1973, 1978), the acquisition of a linguistic category starts with its prototype and gradually expands to the more peripheral members (Slobin 1981; 1985; Taylor 1989, 1995). The prototypical past is [+telic], [+punctual] and [+result] whereas the prototypical progressive is [–telic], [+durative] and [+dynamic]. The researchers

concluded that "initially children restrict their use of tense-aspect inflections to the prototype of a category, then gradually extend the category boundary, and eventually acquire the adult norm" (Shirai & Andersen 1995:759).

This prototype account of the past tense offers a semantic analysis that does not consider the distinction between regular and irregular forms and the different learning mechanisms associated with them. In my child L2 English data, regular and irregular past forms will be analyzed separately. In particular, I will investigate whether the predictions of the aspect hypothesis hold for both regular and irregular past.

According to Pinker and his colleagues (Pinker & Prince 1988,1991; Marcus et al. 1992; Prasada & Pinker 1993, Pinker 1991,1998), the irregular past is associated with rote-learning whereas the regular past is associated with rule-learning. Irregular verbs are a closed class: today, there are about 180 of them, much less than in Old English, and this shows a diacronic tendency towards regularization for those verbs with lower token frequency (Bybee1985: 119-120). Token frequency influences the acquisition of irregular verbs: the more often a caretaker uses an irregular form, the less often the child regularizes it (Bybee & Slobin 1982; Marcus et al. 1992). Moreover, although the irregular past of common verbs is acquired by stage V^4, many irregular verbs are not acquired until school age. Irregular forms are stored in the lexicon and accessed through patterns of associative memory.

Regular verbs are an open class that is systematic and productive: the regular past is formed by adding the suffix *–ed* to the base, which, according to Pinker and his colleagues, suggests the existence of a default rule that is applied to the symbol 'verb'. The acquisition of the regular rule is reflected in the onset of regularized forms, i.e. *goed*, after a period when the children produced correct irregular past forms, i.e. *went*. Regularized forms emerge when children are around three and they inflect regular verbs most of the time.

'We argue that the tandem development of *walked* and *breaked* comes from a single underlying process, the acquisition of the 'add *–ed* rule', which manifests itself in correct performance where the rule is called for and errors where it is not'. (Pinker 1998:236)

According to Marcus et al. (1992), regularizations occur when children are unable to retrieve the stored irregular forms because of memory failure and consequently apply a default suffixation rule.

Rote-learning precedes rule-learning: children's irregular past forms are first correct and later regularized. However, the correspondence between regular/irregular morphology and rule/rote-learning is not one-to-one. As Pinker and his associates acknowledge, systematic patterns exist also for irregular verbs. According to Bybee & Slobin (1982), irregular verbs are organized into classes and accessed through the use of generalizations defined as schemas.

'A SCHEMA is a statement that describes the phonological properties of a morphological class (in this case, past tense)' (p.267).

Bybee & Slobin distinguished eight classes of irregular verbs according to the presence or absence of two defining factors: a final dental consonant (*t/d*) and an internal vowel change. The members of a class have family resemblances because they share some properties with the prototype (Rosch & Mervis 1975). For example, there is a class of irregular verbs that contains verbs undergoing a vowel change from /ɪ/ to /æ/ or to /ʌ/. The best exemplars of this class are verbs ending in a velar nasal (*sting/stung*, *drink/drank*). However, verbs ending in a nasal (*swim/swam*, *win/won*) or in velar (*dig/dug*, *stick/stuck*) also belong to this class because they share a feature with the prototype.

In preschoolers, no-change verbs (*hit/hit*, *cut/cut*) as well as verbs with a past form that undergoes a vowel change and ends in *d/t* (*feel/felt*, *catch/caught*) were regularized less frequently than verbs forming a past tense only through a vowel change (*blow/blew*, *sing/sang*). Bybee & Slobin (1982) argued that the children applied a schema stating that

a verb ending in *t/d* corresponds to an acceptable past tense. Around the age of seven or eight, the suffixation rule (add *–ed* to the base) takes over the schematic analysis.

For most English verbs, regular and irregular, the past tense coincides with the past participle: *walk/walked/have walked, cut/cut/have cut, win/won/have won.* Therefore, in the acquisitional data, it is impossible to distinguish a past tense from a bare past participle except for those irregular verbs that have two distinct forms. Brown (1973:335) noticed that Sarah used *done* and *seen* several times whereas Adam & Eve used *been*. In these children's speech not only were distinct past participles rare but also the present perfect auxiliary never emerged, despite the presence of *have*, *has* and *had* as main verbs.

However, one of the most frequent first words is the past participle *gone* and children use it primarily to indicate the disappearance or non-presence of an object (Brown 1973; Gopnik 1984). It should be pointed out that Adam, Eve and Sarah were native speakers of American English. American English speakers would use a simple past for many contexts where British English speakers would require a present perfect.

In the next two subsections, I will concentrate on the empirical findings from studies in the acquisition of English and Italian.

2.1.1 L1 English studies

In his pioneering research, Brown (1973) studied 14 morphemes applying the criterion of obligatory contexts of use, according to which a morpheme is acquired if it is used correctly in at least 90% of the contexts where it is required. Using this criterion, Brown (1973) analyzed the longitudinal data from three children, Adam, Eve and Sarah and noticed that their morphological development followed the acquisitional order in (2-4). The same order was found later by de Villiers & de Villiers (1973) in a cross-sectional study of 21 children aged between 1;4 and 3;4.

(2-4) BROWN'S 14 MORPHEMES

MORPHEME	AGE OF MASTERY
Progressive *–ing* (no auxiliary)	1;7 – 2;4
In	2;3 – 2;6
On	2;3 – 2;6
Regular plural *–s*	2;3 – 2;9
Irregular past	2;1 – 3;10
Possessive *'s*	2;2 – 3,4
Uncontractible copula	2;3 – 3;3
Articles *a, the*	2;4 – 3;10
Regular past *–ed*	2;2 – 4;0
Regular third person *–s*	2;2 – 3;10
Irregular third person	2;4 – 4;2
Uncontractible auxiliary	2;5 – 4;0
Contractible copula	2;5 – 4;1
Contractible auxiliary	2;6 – 4,2

The progressive is the first morpheme to emerge and to be acquired presumably because there are no irregular progressives to confuse the child (Brown 1973: Kuczaj 1978). The progressive is always regular, unlike other inflections such as the past tense, where the presence of both regular and irregular forms induces overgeneralization errors. Throughout the five developmental stages, the progressive is used in a bare form without a systematic auxiliary to indicate 'an action or state in fact of temporary duration and true at the time of utterance' (Brown 1973:318). It is only after Stage V that the full progressive is mastered.

In fact, Berman & Slobin (1994a) found that three- and four-year-olds often omitted the progressive auxiliary.

(2-5) a. And that – he floating off, uh – sitting down. (3;4)

b. And here, he trying to get the bees, trying to get the bees. (3;11)

Berman & Slobin (1994a) analyzed the narratives of children aged from three to five years as well as those of nine-year-olds and adults. They noted that children up to the age

of five used the progressive as a default present tense, with the function of an 'immediate present tense'(p.139) to mark events as if they were happening at the time of speaking.

(2-6) Here he's looking in his boot. Now he's looking out the window. (4;11)

Conversely, in older children progressive aspect is increasingly applied to mark the background of a situation (2-7). Nine-year-olds are able to structure their narratives in the past. Most of them chose the past as an anchor tense, unlike most of the youngest children, who, being unable to anchor their narratives to a single tense, shift back and forth between present and past tense. The older children's preference for the past tense explains why they use the past progressive more than younger children do.

(2-7) And that night he was watching it, and when he went to sleep, the frog got out of his jar... (9;11)

According to Berman & Slobin (1994a), the use of the progressive as a basic present tense is reflected in its overextension to statives which three- and 4-year-olds occasionally produce.

(2-8) He's seeing that the frog got out. (4;8)

This contrasts with the traditional assumption that the progressive is not overextended to stative predicates (Brown 1973; Kuczaj 1978). Similarly, Shirai (1991, 1994) found stative progressives even in earlier stages of language acquisition.

(2-9)	a.	*EVE: I seeing it it.	(Eve, 1;11)
	b.	*NAO: seeing Mickey.	(Naomi, 1:10)

Shirai analyzed the data of three children: Adam from age 2;3 to 4;10, Eve from age 1;6 to 2;3 and Naomi from age 1;6 to 4;9. Adam and Eve's corpora are from Brown (1973); Naomi's corpus is from Sachs (1983). Shirai claimed that the presence of stative progressives in a child's speech is associated with motherese, as indicated in (2-10) which

represents the frequency of stative progressives out of the total occurrences of progressives produced by the three children and their mothers.

(2-10)		CHILD	MOTHER
a.	Adam:	1/274	0/138
b.	Eve:	5/217	0/209
c.	Naomi:	23/668	20/512

The only stative progressive that Adam produced out of 274 progressives could also be coded as an activity, as Shirai himself admitted.

(2-11) ADA: with a leg on it # with a leg # standing like this. (Adam 3;1)

Eve's five stative progressives involve three instances of *being*, which, as Shirai pointed out, is treated by the child as a lexical item. Moreover, *being* is used twice (*Fraser being silly; you being silly*) to indicate stage-level properties. The predicate in *I going bare back*, which Shirai (1991:73) considered as a marginal case of stative, can be classified as an activity because *go* is inherently dynamic. Stage-level properties are also present in the stative progressives produced by Naomi (*feeling better, being good boy, my tummy is hurting, I'm feeling ok, I'm not feeling well*).

Stative progressives that display stage-level properties cannot be considered instances of overgeneralization. A form (or its use) is defined as overgeneralized when it is non-standard-like: this is not the case of stage-level predicates occurring with the progressive because they are normally used in adult speech. Furthermore, the distinction between stage-level statives and individual-level statives lies precisely in the compatibility of the former with the progressive marker (see 1.2.3.1 and 1.3.2). In the data analyzed by Shirai, overgeneralized uses of the progressive include *seeing, needing, loving* and *having* as indicator of possession. The progressive applied to these statives represents a marked choice (see 1.3.2) that could be defined as 'overgeneralization'. Specifically, Shirai argued that stative progressives are not very frequent because they represent peripheral instances of the progressive marker, which is prototypically linked with activities.

The past tense is prototypically linked with telic-punctual events (Sachs 1983; Taylor 1989, 1995; Shirai 1991, Shirai & Andersen 1995): Brown (1973:334) first noticed this:

'Appropriate uses of the past begin with a small set of verbs which name events of such brief duration that the event is almost certain to have ended before one can speak. These are: *fell, dropped, slipped, crashed, broke*'.

Antinucci & Miller (1976) reanalyzed Eve's data and found that from the age of 1;9 the child applied the *–ed* inflection, often overgeneralized, only to predicates encoding events with a visible end result (2-12a&b). States and activities were left unmarked: (2-12c&d) are considered like activities because they focus on the process rather than on its result.

(2-12)	a.	(1;9)	Spilled the milk.	(telling the mother she had spilled it)
	b.	(1;10)	It falled in the briefcase.	(doll had fallen out of box into briefcase)
	c.	(1;11)	We eat on napkin.	
		Adult:	Yes, we had birthday cake on napkins, that's right.	
	d.	(2;0)	Fraser write a little man, little big man, big man, and a little lady and a little man	(Fraser had drawn something)

As for their Italian data (2.1.2), the researchers suggested that aspect is more basic than tense and proposed a maturational explanation within a Piagetian framework: at the time when verbal morphology emerges, children are still unable to represent temporal relations between different points on the time axis. Because they are in the sensori-motor period (Piaget 1954, 1971), the children lack a developed cognitive construct of time and therefore their use of past marking is restricted to events with a present, concrete end-state that is the result of a previous process.[5]

Similar results were found by Bloom et al. (1980) but the focus here was more on verb semantics than on children's concept of time. The researchers studied the influence of lexical aspectual features on the emergence of verb morphology in children's spontaneous speech. In fact, *-ed* and the irregular past marked punctual, completive events; *-s* marked completive, durative events; and *-ing* marked noncompletive, durative

events. In their 10-month longitudinal study of four children (1;10-2;6), they distinguished three developmental periods. The irregular past was ranked first in emergence, *-ing* and *-s* appeared at about the same time, *-ed* emerged in the second period and was altogether the least frequent morpheme. Although the irregular past and *-s* were often more frequent than *–ing,* the overall absolute frequency of *-ing* was greater in all three periods.

Shirai (1991) and Shirai & Andersen (1995) investigated the acquisition of English verb morphology in Adam, Eve and Naomi. The results supports the predictions of the 'aspect hypothesis' in that the children's emerging morphology is strongly affected by lexical aspect: past marking is initially restricted to achievements and progressive marking to activities. Moreover, it turned out that the same tendencies towards the aspect hypothesis were noticed in the mothers' speech when they interacted with their children.

To sum up, in L1 English acquisition, the progressive, without auxiliary is the first morpheme to emerge. With the function of a default present tense, it is primarily restricted to durative-dynamic predicates but can also be overextended to statives, albeit occasionally. As to past morphology, it is initially marked on telic predicates. Moreover, the irregular past emerges before the regular past. Unlike younger children, older children anchor their narratives in the past and alternate between simple past and past progressive to mark foregrounding and backgrounding.

These findings will be compared with those from my child L2 English study. Now, let's turn to child Italian.

2.1.2 L1 Italian studies

One of the most comprehensive studies on the acquisition of Italian morphology was conducted by Pizzuto & Caselli (1992), who observed the development of verbs, pronouns and articles, distinguishing between emergence and mastery of inflectional

morphemes. This distinction was operationalized through the criterion of obligatory contexts of use (Cadzen 1968; Brown 1973).

In this study, the longitudinal, spontaneous data of three Italian children (Claudia, Francesco and Marco) aged from 1;4 to 3;0, show that although many grammatical forms emerged in the period considered, very few attained the point of mastery by the end of it. For those that met the acquisition criterion, the lapse between age of first appearance and age of mastery ranged from a minimum of one month to a maximum of a year. Moreover the researchers noticed individual differences in the number of morphemes acquired, the age at which they were acquired and their order of acquisition.

By the age of 3;0 all three children had acquired the feminine singular article *la* and the present tense 3rd-person singular, which they often used, instead of the 1st-person singular, when referring to themselves, as in (2-19b). Claudia and Francesco also acquired the present tense 1st- and 2nd-person singular, the imperative 2nd-person singular, the present tense copula *è*, and the 1st-person subject pronoun *io*. Claudia was the only child who fully mastered the 2nd-person subject pronoun *tu*, the 2nd-person clitics *ti-te* and the present tense/imperative 1st-person plural[6]. On the other hand, Francesco was the only child who achieved productive use of the 3rd-person clitics *lo-la* and of the masculine singular article *il*. Importantly, all the children mastered gender morphology precociously, confirming findings from previous studies (Antinucci & Miller 1976; Bates 1976; Volterra 1976; Hyams 1986, among others). (2-13) illustrates the age of emergence for the verb forms relevant to the child L2 Italian data presented in Chap.4.

(2-13) AGE OF EMERGENCE OF VERB FORMS IN CHILD ITALIAN (Pizzuto & Caselli 1992:520)

		CLAUDIA	FRANCESCO	MARCO
Present	1SG	1;6	1;5	1;8
	2SG	1;4	1;5	1;5
	3SG	1;4	1;9	1;9
	1PL	1;7	1;7	2;0
	2PL	—	2;9	—
	3PL	1;11	1;11	2;0

Past participle		1;4	1;5	2;0
Passato prossimo	1SG	1;9	2;1	3;0
	2SG	2;0	2;3	2;3
	3SG	1;10	1;11	2;0
	1PL	2;3	2;8	—
	3PL	1;11	—	—
Imperfetto	1SG	2;1	2;7	—
	2SG	—	—	1;10
	3SG	2;1	2;3	2;2
	3PL	1;10	2;10	—
COPULA - Present	1SG	2;1	2;6	2;4
	2SG	1;10	2;6	—
	3SG	1;4	1;5	2;0
	3PL	1;10	1;9	—
- *Imperfetto*	3SG	1;4	2;5	—

Bound morphemes such as verb inflections tend to be acquired earlier than free morphemes such as copulas, auxiliaries and especially articles. For example, the past participle emerges before the *passato prossimo*. Also, free morphemes were much more prone to omission errors than to substitution errors. For example, with the *passato prossimo* the omission of the auxiliary was frequent but the choice of the auxiliary was virtually never incorrect.

Findings showed that the general patterns of the Italian morphological development are similar to those observed in child English by Cadzen (1968) and Brown (1973) among others. According to the researchers 'although the copula, auxiliary, article and pronoun systems of Italian are very different from those of English, in both languages they constitute late acquisitions' (Pizzuto & Caselli 1992: 547). Therefore, they concluded that 'Italian children do not master verb morphology at strikingly more precocious ages or stages than English children' (p.249). A crucial difference between the two languages

resides in the development of the present tense 3rd-person singular: in Italian it is acquired between the ages 1;10–2;1 whereas in English it is mastered later, from 2;4 at the earliest to 3;10 or even later.

On a descriptive level, Pizzuto & Caselli (1992) provide empirical evidence about the emergence and development of Italian grammatical morphemes: some of these, i.e. verb forms, represent a crucial part in the study of this dissertation. However, of more direct relevance to my study is the semantic analysis proposed by Antinucci & Miller (1976) and Volterra (1976), both of which also used data from Claudia and Francesco, like Pizzuto & Caselli (1992).

Antinucci & Miller (1976) studied the naturalistic speech of six Italian children from Padua between ages 1;6 and 2;5 and of one child from Rome (Claudia) between ages 1;6 and 2;3. Samples were taken once a month for the Paduan children and twice a month for the Roman child. The cross-sectional data of 48 L1-Italian children aged from 2;0 to 4,4 were added to the longitudinal data. From the beginning of the study, past marking consisted primarily of past participles applied almost exclusively to telic predicates.

(2-14) a. (1;6) Mangiato tutto, bravo Lele.
eat-PP everything
'Ate everything, good boy Lele'. (The child shows his clean plate)

b. (1;9) Seduta.
sit-PP-Fsg
'Sat'. (Said after climbing back on the chair)

c. (1;8) Prese io (calze)
take.PP-Fpl I (socks)
'I took them'

Similarly, Volterra (1976:151) argued that 'in the early use of the participle it is the idea of a state that seems to prevail over that of an accomplishment'. According to Volterra, since the idea of accomplishment implies past temporal reference, for young children this is more difficult to conceptualize than the idea of state, which is linked to the *hic et nunc* of the situation. In fact, the earliest participles that emerge at the age of 1;4-1;5 are

caduto 'fallen' and *seduto* 'seated', where a state is implied for the argument realized as subject. These early participles exhibit gender and number agreement with the subject they refer to, as shown in (2-15a&b).

(2-15)	a.	(Claudia 1:5:20)	Utaa	[= seduta (sitting on a chair)]
	b.	(Claudia 1:7:10)	Aduta a ciola	[= caduta la pistola (the gun has fallen)]

Very soon the auxiliary *essere* surfaced:

(2-16)	a.	(Claudia 1:7:20)	E' aduto	[= è caduto (throwing the ring away)]
	b.	(Iole 1:5:7)	S'è rotta	[= si è rotta (the cake broke)]

The participles where a state is implied in the argument realized as direct object, i.e. transitives (2-17a&b), emerged afterwards, and later appeared the first participles where no state is implied in the verb arguments, i.e. unergatives (2-18a&b).

(2-17) a. (Iole 1;6;6) Uè messa la palla? [= dove hai messa la palla? (where did you put the ball?)]
b. (Iole 1;8;2) Hai itta la bamboletta? [= hai vista la bamboletta? (did you see the little doll?)]

(2-18)	a.	(Iole 2;0;28)	Ecco, ho giocato.	(well, I played)
	b.	(Francesco 2;4;19)	Ha pianto, allora ha pianto.	(he cried, well he cried)

Volterra's analysis drew on Parisi (1976) who studied the formation of the *passato prossimo* focusing on the role of stativity in participle agreement and auxiliary selection. The importance of a state component in auxiliary selection is advocated by Centineo (1986;1996) and Van Valin (1990), as discussed in 1.3.1.1.

Antinucci & Miller (1976) and Volterra (1976) agree that children first use past participles as adjectives.[7] Moreover, Antinucci & Miller (1976) noticed that 'the children never made a mistake in surface agreement rules' (p.171). The past participle agreed with the subject of intransitive verbs indicating change of state with a clear result, i.e. unaccusatives, as in (2-14b), (2-15a&b), (2-16a), and with the object of transitive verbs,

as in (2-17a&b) and (2-19a&b). The children appear to be sensitive to the semantic-conceptual notion of affectedness and they mark it with gender and number agreement on the past participles referring to the subject of unaccusatives and to the object of transitives (see 2.1)

(2-19) a. (1;10) La signora ha chiusa la porta.
the lady have.PRES.3sg close.PP-Fsg the door
'The lady closed the door'.

b. (2;1) Presa Checco campana. (Checco = speaker)
take.PP-Fsg bell
'Checco took the bell'

The past participle and later the *passato prossimo* emerge as markers of resultativity. This is a core meaning of the *passato prossimo*, and historically, its original one (see 1.1.1.2). The researchers argued that the children's past morphology encoded aspect rather than tense and presented two arguments in favour of this claim. The first one is that the past participle is used to describe the end-state of an entity and therefore the agreement with the direct object shows the adjectival function of the past participle. The second argument draws on the semantic nature of the verbs that first receive past marking: these are all change of state verbs, therefore expressing telicity. The aspectual value of early participles and their initial restriction to telic verbs was also found in Calleri (1990). Atelic predicates are first encoded by the present tense and later by the *imperfetto*. This tense emerges at around 2;1 years as a marker of non-actuality in the narration of fictitious events:

(2-20) a. (2;1) C' era una bambina. Una bambina che piangeva.
there be.IMPF.3sg a little.girl a little girl who cry-IMPF-3sg
'There was a little girl. A little girl who was crying'.

b. (2;2) Il lupo faceva woo-woo, l' orso faceva woo-woo.
the wolf do.IMPF-3sg the bear do.IMPF-3sg
'The wolf was going woo-woo, the bear was going woo-woo'.

Antinucci & Miller adopted a Piagetian approach and argued that because of cognitive deficit, children lack a relational concept of time and therefore they use past participle or the *passato prossimo* for events resulting in an end state. Similarly, the *imperfetto* does not emerge as a past tense but as a linguistic marker of a fictitious world: it is a form of 'symbolic play' (Piaget 1951), which develops towards the end of the sensori-motor period. According to the researchers, from an acquisitional perspective, non-actuality represents the core meaning of the *imperfetto* that is later extended to express pastness. The cognitive distinction between real and unreal is reflected in the linguistic distinction between present and past in that a situation is past when it is non-actual in the present. The initial restriction of the *imperfetto* to states and activities is justified by their durative trait, which makes them natural components of narrative contexts.

Contra Antinucci & Miller (1976), Calleri (1990) found evidence that the *imperfetto* not only emerged before age 2;1 but also that the children used it from the beginning as a deictic marker to express a real past event:

(2-21) a. (1;8;15) piangeva.
cry-IMPF-3sg
'S/he was crying'.

b. (2;2) c' era M., guardato B. che correva. (event occurred a week before)
there was look.at-PP who run-IMPF-3sg
'There was M., looked at B. that was running'.

c. (2,2,9) correvo forte, sono caduto e piangevo (a few hours before)
run-IMPF-1sg fast be.PRES.1sg fall-PP and cry-IMPF-1sg
'I was running fast, I fell and I cried'.

Surprisingly, the *imperfetto* was overextended to the area covered by the *passato prossimo* but the reverse did not happen, i.e. the past participle or the *passato prossimo* were never overextended to imperfective contexts.

(2-22) a. (2;1;11) ieri Beppe tirava su l' aratro. (event occurred an hour before)
yesterday pull-IMPF-3sg up the plough
'Yesterday Beppe lifted the plough'.

b. (2;3;15) mi sono punto [self-correction] mi pungevo. (a few hours before)
REFL be.PRES.1sg prick-PP REFL prick-IMPF-1sg
'I pricked myself'.

Calleri indicated that the *imperfetto* is used as a general deictic past to signal that the event and its concrete effects are definitely over. Therefore the *imperfetto* is overextended when the results of the event are no longer visible because of the interval between the time of the utterance and the time of the event.

(2-23) a. (1;10;13) buttati (said immediately after the event)
throw-PP-Mpl
'Thrown them'.

b. (2;1;26) buttavo la cipolla. (event occurred a few hours before)
throw-IMPF-1sg the onion
'I threw the onion'.

While the past participle and the *passato prossimo* are used with telic predicates to mark resultativity, the *imperfetto* is first used as a default past tense that neutralizes the perfective/imperfective distinction and only later is extended to counterfactual contexts such as story-telling. The pattern of the *imperfetto* suggested in Calleri (1990) is specular to that indicated by Antinucci & Miller (1976). However, there is a similarity between the children's use of *imperfetto* in the two studies: with this tense, the children distance themselves from the event they describe. This leads to non-actuality in Antinucci & Miller (1976; 2-20a&b above) and to underextension of the participle/*passato prossimo* in Calleri (1990; 2-23b above). However, Calleri (1990) does not provide a data analysis in terms of lexical aspectual categories, therefore a distributional bias can not be observed.

In a study with older children, Bazzanella & Calleri (1991) investigated the use of temporal morphology in narrative scaffolding. After asking 34 children aged between 2;10 and 5;10 to tell each a classical fairy tale, they found that out of 130 instances of non-standard tense switching 58 were marked with the simple present, 34 with the *passato remoto*, 18 with the *imperfetto* and 16 with the *passato prossimo*. Furthermore,

the children structured their narratives paratactically, resorting primarily to connectives such as *poi* and *allora* (both translatable with 'then'). This is consistent with what Berman & Slobin (1994:178) found with L1 English children.

'The single most favored connective device among these children is *and then*, which is used by every single 5- and 9-year-old. *And then* is evidently a criterial marker of narrative construction in English'.

Unfortunately Bazzanella & Calleri (1991), unlike Berman & Slobin (1994), do not differentiate children's narratives according to age groups: in the three-year range considered it would be interesting to analyze how narrative scaffolding develops with age. However, the study provides some important findings that require attention.

In the children's speech, the simple present is associated with elements that tie the discourse deictically to the *hic et nunc* of the situation: *verba dicendi* (2-24a), present time adverbials such as *ora* 'now' (2-24b), and frequent interactions with the addressee (2-24c).

(2-24) a. poi incontrò un un un/ il suo/ il [ride] lupo e gli *dice*/ ciao bambina/ dove vai:↑dove vai↑
'then she met a/ his/ the [laughs] wolf and he *says* to her/ hello little girl/ where are: you going↑ where are you going↑'.

b. ma poi è arrivato sulla collina e ha visto la tartaruga/ *ora* lui glielo *dice* ai suoi piccoli che/ non/ poi lui aveva perso.
'but then he arrived+P on the hill and saw+P the tortoise/ *now* he *tells* his children that/ not/ then he had+I lost the game'.
[simple past+P = *passato prossimo*; simple past+I = *imperfetto*]

c. ADULT: è finita che il lupo si è mangiato Cappuccetto Rosso? Non si salva Cappuccetto Rosso alla fine della storia?
'it ends with the wolf eating Little Red Riding Hood? Doesn't Little Red Riding Hood escape at the end?'.
CHILD: poi/ poi *alliva* [=arriva] un cacciatore.
'then/then a hunter arrives'.

The *passato remoto* is the second most frequent tense used in non-standard tense switching. This is a remarkable finding because the *passato remoto* is virtually absent in

Northern Italian, the variety to which these children, living in Turin, had been exposed to. Furthermore, the L2 English children of my study come from Northern Italy, two from Turin and one from Milan.

The *passato remoto* is the tense that develops the main line of narration in fairy tales; therefore its wide use in the children's narratives shows the influence of a standardized input. Furthermore, the fact that these children would resort to the *passato remoto* when narrating fairy tales but not in ordinary conversation suggests that the use of verb forms can vary according to different types of discourse. However, the *passato remoto* often alternates with the *passato prossimo*:

(2-25) ma un giorno Pinocchio si smontò (2) e disse/ guarda ci sono delle legni/ c'è anche una te:sta/ fatta di legne (2)/ la l'*hanno presa*/ e/ hanno costruito ancora Pinocchio.
'but one day Pinocchio took himself to pieces (2) and said/ look there is some timber/ there is also a he:ad/ made of wood (2)/ they *took*+P it/ and built+P Pinocchio again'.

The *passato prossimo* and the *imperfetto* are often used as aspectual markers, the former conveying resultativity and the latter conveying durativity. These distinctive aspectual values are illustrated in the *passato prossimo/ imperfetto* alternation in (2-26):

(2-26) è diventato rosso rosso/ e/ da quel giorno (2) si er rarava mai/ *si lavava* sempre la faccia.
'he has become very red/ and/ from then on (2) he never/ always *washed*+I his face'.

The *imperfetto* can be overextended by attraction in that an *imperfetto* in the utterance can attract a subsequent one. An overextended use of the *imperfetto* was also noticed with younger children in Calleri (1990). Here it is particularly frequent with three-year olds, who seem to avoid tense switching when the narration requires it, thus showing a difficulty in distinguishing the foreground from the background.

(2-27) a. c'era una volta una bambina che si chiamava cappuccetto↓/ *diceva* sua mamma/
'once upon a time there was+I a little girl whose name was+I Little Red Riding Hood↓/ her mummy said+I/'.

b. an:che i suoi/ anche gli altri porcellini/ lo aiutavano/ poi/ il lupo veniva/ *soffiava*.

'also his/ also the other piglets/ helped+I him/ then/ the wolf came+I/ he *blew*+I'.

The narratives of three-year olds are generally simple, with a predominant use of the simple present. Throughout the corpus, this is the most frequent tense presumably because since it is the first tense to be acquired it is the one that children master best.

To sum up, L1 Italian studies show the early emergence of bare past participles. The *passato prossimo* surfaces later: the auxiliary is often omitted but virtually never incorrectly selected. Initially, the past participle and the *passato prossimo* are treated like adjectives that express the resultant state of events. In fact, the past participle and the *passato prossimo* mostly encode telic predicates. The notion of affectedness is morphologically marked on past participles, which agree in gender and number with the subject of unaccusatives and with the object of transitives. The auxiliary *essere*, which indicates an affected subject, emerges relatively early.

Atelic predicates are first inflected in the present tense and then by the *imperfetto*, which appears later than the past participle and the *passato prossimo*. Children initially use the *imperfetto* to distance themselves from the situation they describe. This is why it is often overextended to past perfective contexts generally expressed by the *passato prossimo*. However, the reverse never occur, i.e. the *passato prossimo* is never used instead of the *imperfetto*.

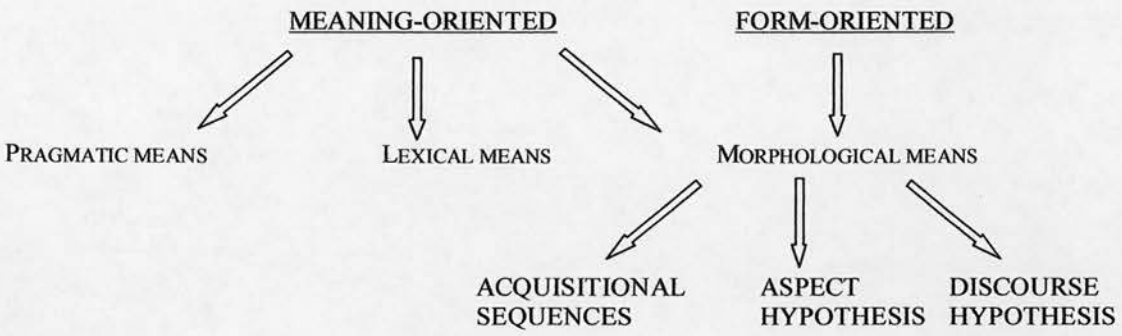
In the narratives of older children, the most recurrent tense is the present followed by the *passato remoto*. Furthermore, the *passato prossimo* alternates with the *imperfetto* to mark the aspectual distinction between resultativity and durativity.

These findings from child Italian will be compared with those from my child L2 Italian study. Now, we turn to the second language acquisition of tense-aspect morphology.

2.2 SECOND LANGUAGE ACQUISITION

Bardovi-Harlig (2000) distinguished two main approaches to the acquisition of temporality in a second language: the meaning-oriented approach and the form-oriented approach. The two approaches interpenetrate as shown in the diagram in (2-28) adapted from Bardovi-Harlig (2000:11)

(2-28) APPROACHES TO L2 ACQUISITION OF TEMPORALITY(Bardovi-Harlig 2000:11)



The meaning-oriented approach is embodied in the adult L2 acquisition studies conducted cross-linguistically by the European Science Foundation researchers (Klein & Perdue 1992; Perdue 1993; Dietrich et al. 1995; Becker & Carroll 1997). The focus is on the broad investigation of the concept of temporality, where learners move from a pragmatic to a lexical and finally to a morphological stage. These three acquisitional stages correspond respectively to the pre-basic, basic and post-basic varieties (Klein & Perdue 1996). In the pragmatic stage learners encode temporal relations by scaffolding their discourse, by structuring their narrative in chronological order and by implicitly referring to a situational context. In the lexical stage, learners express temporality through temporal and locative adverbials (*now, then, yesterday, here, there*), connectors (*and, and then, so)*, calendric reference (*January 27)* and verbs (*start* and finish).

The final stage in the acquisition of temporal expression is represented by the development of verb morphology. This is the scope of the form-oriented approach, which can be divided into three overlapping strands of inquiry: acquisitional sequences, aspect hypothesis and discourse hypothesis. Studies on the acquisitional sequences observe the

emergence of tense-aspect morphology and on the function associated with each form (Kaplan 1987; Schlyter 1990; Dietrich, Klein & Noyau 1995; Giacalone Ramat & Banfi 1990; Giacalone Ramat 1997; Wiberg 1996; Andersen 1986; Salaberry 1999). The aspect hypothesis (see below) concentrates on the influence of lexical aspect on the learner's tense-aspect morphology whereas the discourse hypothesis focuses on the influence of backgrounding and foregrounding in the learner's narratives (Kumpf 1984; Trévise 1987; Véronique 1987; Noyau 1984, 1990; Flashner 1989; Bardovi-Harlig 1995, 1998, von Stutterheim 1991).

My study is located within the framework of the aspect hypothesis. Rooted in the theories of lexical aspect outlined in the previous chapter, the aspect hypothesis was fuelled by research in first language acquisition (Bronckhart & Sinclair 1973; Antinucci & Miller 1976; Bloom et.1980; Weist et al 1984) and in creoles (Bickerton 1975, 1981; Givón 1982).

In second language acquisition, the aspect hypothesis was initially formulated by Andersen (1986, 1989, 1991) as defective tense hypothesis, following Weist et al (1984 – see 2.1).

'In beginning stages of language acquisition only *inherent aspectual* distinctions are encoded by verbal morphology, not tense or grammatical aspect'. (Andersen 1991:307)

For the first time in second language research, Andersen applied the Vendler (1967) classification to the analysis of L2 Spanish data collected through a quasi-longitudinal study of two L1 English speakers, one child and one pre-adolescent. Findings show that at first, the preterit is restricted to achievements whereas the imperfect is restricted to states. The acquisitional sequence of the preterit and that of the imperfect are specular, although the former starts earlier than the latter.

(2-29) a. PRETERIT: achievement > accomplishment > activity > state.
b. IMPERFECT: state > activity > accomplishment > achievement.

The aspect hypothesis is a relative version of the defective tense hypothesis, which is too difficult to sustain because it postulates a clear-cut distinction between tense-aspect and lexical aspect. Predicting that 'early morphology is predominantly guided by aspectual characteristics of the verbs (or the situation they describe)' (Andersen & Shirai 1994:137), the aspect hypothesis applies to both first and second language acquisition. Its four claims are illustrated in 2.1.

In 2.2.1and ff., I will review some empirical studies that addressing the aspect hypothesis in the acquisition of L2 English and L2 Italian by adults.

2.2.1 Adult second language acquisition

2.2.1.1 Adult L2 English studies

Robison (1990) conducted an hour-long conversational interview with Rogelio, a native speaker of Spanish with little ESL instruction. Focusing on the distinctions stative/dynamic and punctual/durative, Robison found that most predicates appeared in the base form but when verb morphology was applied, past marking correlated with punctuality and progressive marking with durativity.

(2-30) When I *went* [punctual][8] to the managers I speak English 'cause are an uh American too. But ... when I *havin'* [= conduct (durative)] a ... uh ... interview with uh ... manager, I speak English. When I have interview with the cook, I speak Spanish.

Statives occurred either in the base form (137/176 – 78%) or in the progressive (39/176 – 22%).

(2-31) a. Because an' uh an' when I *havin'* uh fourteen years [when I was fourteen years old] I go out [in] my town, an' I go to work in another city.

b. Because when I *likin'* something, I like to study.

c. Because she don't *wanting* to come here [to the States], 'cause y'know the–the

borderlines *havin'* a problems.

Interestingly, this is one of the few L2 English studies reporting on the overgeneralization of the progressive to statives. In fact, stative progressives were not observed in the other studies reviewed here.

Bardovi-Harlig (1992) investigated the association of form and meaning in the developing tense and aspect systems of adult learners of ESL. She conducted a cross-sectional study testing 135 ESL instructed learners, from various L1s, at six levels of proficiency from beginning to advanced level. Data were collected through a three-part written elicitation task, composed of a cloze passage, a composition, and a multiple choice recognition task. The data from the compositions suggest that some learners experiment with systematic but non-target-like associations of meaning with form, using the past progressive to signal habitual past events and the past perfect as a scene-setter in introductions. An example is:

(2-32) "As you know, there are a lot of differences between the last time and the current time, this time. My grandparents *had lived* in a small town with close community. There weren't in their community any chance to communicate with other societies...The last reason is the style of life. They *lived* in a small town and they *were working* in the farms but now we live in the big city with difficult jobs". (Arabic L1, p.271)

The general trend is that L2 learners fail to supply past tense marking in obligatory context much more frequently for state and activity verbs rather than for achievement verbs. Specifically, past marking is more frequent on achievements (63.2%) than on activities (35.1%) or on states (31.6%).

Bardovi-Harlig & Reynolds (1995) tested the hypothesis that lexical aspect will influence the acquisition of simple past. They conducted a cross-sectional study with 182 adult classroom ESL learners at six levels of proficiency, from beginning to advanced level. Data were collected through a completion task: learners were given the base form of the verb and asked to supply the missing word(s) in the blank. Results indicate a high level of

appropriate use of simple past with achievements and accomplishments, even at the lowest level of proficiency, whereas state and activity verbs exhibit an undergeneralized use of simple past. The early use of simple past with event verbs suggests that learners find telic verbs to be the best past-tense carriers. States are mostly inflected in the present tense, activities in the progressive. Importantly, the progressive is not overgeneralized to statives. Since these instructed L2 learners exhibit the same acquisitional sequence as those reported for L1, the researchers concluded that the influence of lexical aspect may be an acquisitional universal.

Bardovi-Harlig & Bergström (1996) conducted a cross-sectional study investigating the acquisition of tense and aspect in a classroom setting. Using a film retell task, written narratives were collected from 23 learners of English as a second language and compared with narratives collected from 23 learners of French as a second language. Here, learners exhibit similar patterns of distribution of tense/aspect morphology across target languages, revealing the effects of lexical aspect on the distribution of morphology. In both L2 English and L2 French, past spreads from telic verbs to activities, as in:

(2-33) a. The police left (ACH) the man and caught (ACH) the women. The man wonts (STA) go to the prison because he is poor (STA) and he sleep (ACT) on the street every day.

b. Il y avait (STA, imp) une femme. Elle a (STA, pres) très faim. Cependant elle a essaye (ACT, pc) de voler du pain de l'auto. Une personne a vu (ACH, pc) ça et a parlé (ACT, pc) au policier."

However, the English progressive and the French imperfect show an asymmetrical spread. In the English narratives, base forms are the default forms for activities, but progressive forms prove to be a strong alternative: the lowest proficiency learners used either present progressives, e.g. *is walking*, or bare progressives, e.g. *the girl crying*. Past progressive emerges at intermediate level. Moreover, the use of the progressive is restricted to activities and it is not overgeneralized to states. On the other hand, the French imperfect spreads from states to activities, to accomplishments, to achievements, following the same route posited by Andersen (1991) for the Spanish imperfect. The data

show that the *imparfait* begins to spread across the system at advanced level, indicating that it is acquired later than the *passe composé*.

Although with some variations, adult L2 English studies addressing the aspect hypothesis (Flashner, 1989; Bardovi-Harlig 1992; Bardovi-Harlig and Reynolds 1995; Bardovi-Harlig and Bergström 1996; Robison, 1990, 1995) generally indicate that: a) past morphology is strongly related to achievements or accomplishments or both and b) progressive morphology is strongly related to durative predicates, with activities receiving more *–ing* marking. However, some studies indicate that the progressive marker can also be overextended to statives. Andersen & Shirai (1996) mentioned language transfer of imperfective aspect as a possible explanation for overgeneralized progressives. However, none of the studies considered here investigated the influence of the L1 in the acquisition of L2 tense-aspect morphology. Language transfer and its implications for tense-aspect are discussed in 2.2.3 and ff.

2.2.1.2 Adult L2 Italian studies

The study on the acquisition of Italian as a second language was promoted by the 'Pavia project'. Coordinated by the University of Pavia, this seminal research project shed light on a previously understudied L2 by presenting longitudinal and cross-sectional data from typologically different native tongues such as Chinese, Tigrinya, Persian, English, German and French (Giacalone Ramat 1990, 1992, 1993, 1995; Berretta 1990, Bernini 1990; Giacalone Ramat & Banfi 1990; Bernini & Giacalone Ramat 1990). At the beginning of the study, the participants' time of residence in Italy ranged from 45 days to 4 years. Importantly, the length of stay did not correlate with a higher L2 proficiency. The observation was conducted for 6-12 months at approximately 2-4 week intervals.

On the basis of these crosslinguistic L2 data, Giacalone Ramat (1995) posited the sequence in (2-34) for the acquisition of L2 Italian temporal morphology. The

progressive periphrasis, being a marked construction, appears much later (Giacalone Ramat 1997):

(2-34) PRESENT > (AUXILIARY +) PAST PARTICIPLE > IMPERFECT > FUTURE.

After an initial stage where the present emerges as a basic form, past participles mark punctual and telic predicates (2-35) and, less frequently, durative predicates, i.e. *studiare, giocare*, viewed perfectively (2-36):

(2-35) a. *arrivato Italia* 'arrived Italy'.
b. *mangiato banana* 'eaten banana'.
c. *adesso lasciato (lavoro)* 'now left work'.
d. *fatto solo fino elementare* 'done only until elementary school'.

(2-36) a. Int.: che ti di scuola han fatto i tuoi fratelli? (in Cina)?
what kind of school did your brothers attend in China?
S: loro an/studiato-PAST PRTC quello di commercio. (S 4 – 1 year, 3 months)
they attended a commercial school

Stative predicates are consistently used in the unmarked form of the present, later in the *imperfetto*. In all learners, *essere* and *avere* are the first statives to be encoded by the *imperfetto*, which, however, constitutes late acquisition (Bernini 1990).

The group of Chinese learners is homogeneous as to limited L2 exposure and proficiency. In Giacalone Ramat (1990) four of them were observed for about 7 months, after they had been resident in Italy for a period ranging from one to four years. At the time of the study, the participants were attending a first level course of Italian for foreigners, but, apart from that, they had little contact with the L2.

Their temporal system revealed a functional opposition between a basic form and a perfective form. The infinitive and the present represent the basic form opposed to the past participle, which marks perfective aspect and, more generally, past time reference. The past participle appears mostly with telic predicates, i.e. *imparato* 'learned',

dimenticato 'forgotten', *andato Pechino* 'gone Beijing', *uscita da casa* 'left home', but also with durative-atelic predicates, i.e. *lavorato* 'worked', *rimasto* 'stayed', although to a lesser extent.

The *imperfetto* is absent in these learners' interlanguage. In fact, they resort to the basic form, i.e. the infinitive (2-37a) or the present (2-37b), to express imperfective aspect in the past.

(2-37) a. (the participant is describing her lifestyle in China)
con amici stare insieme + mangiare fuori + vedere film + molto libere + non come Italia
with friends stay-INF together eat-INF out see-INF film very free not like Italy
+++ qua lavorare sempre. (T 4. 212-213)
here work-INF always

b. I: Tu vivevi in campagna o in città, in Cina?
did you live in the country or in town in China?
W: Vivo in una grande città + Sciangre (Shangai) (W 3.263)
(I) live in a big city Shangai

As to the perfective auxiliaries, two of the four learners hardly ever use them whereas the others show a developing *passato prossimo*. The most frequent forms are: *ho visto* (from *vedere* 'see'), *ho/ha fatto* (from *fare* 'do/make'), *sono/è andato* (from *andare* 'go'). No overextension of one auxiliary versus the other is reported.

Giacalone Ramat (1995) concluded that lexical aspect played a crucial role in the acquisition of tense-aspect morphology, which develops according to principles of prototypical categorization (Dahl 1985; Lakoff 1987; Taylor 1989; Andersen & Shirai 1994, 1996; Shirai & Andersen 1995).

'Indeed our data from second language acquisition lend support to the claim that acquisition starts from a central prototypical meaning, based on semantic properties of verbs and on the speaker's perspective'. (p.301)

The initial prototype is characterized by a cluster of semantic features: telicity, perfectivity and past time reference. The developmental route for past morphology starts from telic verbs and then spread to activities and finally to states. Giacalone Ramat (1995:302) suggested that learners follow a 'Principle of Selective Association', which is formulated as 'put together features that are semantically congruent, such as telicity, perfectivity, pastness'. As discussed in 1.1.1 and 1.3.1, these features are prototypically linked.

2.2.2 Child second language acquisition

Child SLA is a bridge between first language acquisition and adult SLA in that, like first language acquisition, child SLA occurs within the critical period, but, like adult SLA, a native tongue has already been acquired. Thus, the role of language transfer has to be considered.

Because it can share L1 acquisition features, child SLA borders on bilingualism. McLaughlin (1978) distinguished child second language acquisition from bilingualism in that the former refers to the successive acquisition of a second language by children whereas the latter refers to the simultaneous acquisition of two languages. McLaughlin (1978:11) set an arbitrary cut-off point at the age of three, when the first language becomes established in the child.

'The child who is introduced to a second language before 3 years of age is said to be *simultaneously* acquiring two languages. The child who is introduced to a second language after 3 is said to be *successively* acquiring two languages'.

Thus, child SLA occurs after the age of three but before puberty. However, these boundaries can be fuzzy. Since certain L1 properties are acquired after the age of three, child SLA could exhibit both simultaneous and successive acquisition at a given developmental stage (Lakshmanan 1995). Similarly, the onset of puberty could range between 11 and 13 depending on the L2 properties being acquired (Foster-Cohen 2001).

Although cut-off points are difficult to operationalize, it is still possible to delimit the age range that is crucial to child second language acquisition.

'Even though the precise beginning and end points of child SLA are vague, we surely can take as core to the topic the ages between five and nine, when the primary language is mostly settled and therefore whatever effects there might be from a critical or sensitive period'. (Gass & Selinker, 2001:101)

The participants in my study, whose profile is described in 3.2, fall within the scope of child SLA: they are aged between 7 and 9, are settled in their L1 and have started learning the L2 before puberty. The fact that the first language is already acquired raises the issue of its influence on the acquisition of a second one.

'The findings thus far suggest that we cannot entirely rule out the influence of the L1 in child L2 acquisition'. (Lakshmanan 1995:319)

Language transfer is discussed in 2.2.3.1. Since child SLA of tense-aspect morphology is still under-investigated, the intent of my bi-directional study is to contribute to this research area. First, I will review some child L2 studies related to the acquisition of tense-aspect in English and Italian (2.2.2.1 and 2.2.2.2).

2.2.2.1 Child L2 English studies

The two studies reviewed in this section exhibit different learning environments and first languages. In Housen (1995), the children are native speakers of French and Dutch learning L2 English in an instructed environment; in Rohde (1996), the children are native speakers of German learning L2 English in a naturalistic environment.

Housen (1995) observed six ESL learners of the European Schools in Belgium for three years. The participants, three L1 French girls (SAH, LEN, MAG) and three L1 Dutch girls (FLU, EMA, EVA) were eight at the beginning of the study. These learners differ in

the amount of L2 exposure outside ESL classes: EVA and EMA have the most, SAH, LEN, MAG, FLU have little or hardly any. There is also one French-Dutch bilingual, EMA.

Data were collected at six-month intervals through spontaneous and elicited production, comprising conversation, personal narration, picture description and story retelling. The researcher found that the strongest support in favour of the aspect hypothesis came from the distribution of the progressive marker. This morpheme was primarily associated with durative-dynamic predicates, i.e. activities and, to a lesser extent, accomplishments.

(2-38)	a.	SAH1:	she dancing	(ACT)
	b.	LEN2:	uh I swimming.	(ACT)
	c.	MAG3:	and then a man coming.	(ACC)
	d.	FLU2:	and there # they are # uh helping him.	(ACT)
	e.	EMA4:	and that they were making a film.	(ACC)
	f.	EVA1:	his nose was blooding.	(ACT)

Gradually, the progressive spread to other aspectual classes, even to states. Stative progressives appeared in the interlanguage of the L1 Dutch speakers.

(2-39)	a.	FLU1:	here it is raining.
	b.	EVA5:	I was feeling real 0 [=! retches].
	c.	EMA4:	well I was knowing that.

In Housen's analysis, states include predicates related to weather (*rain*), emission (*shine*) and posture (*stand, stay*). In my analysis, predicates indicating weather and emission are classified as activities and so are postural predicates, when the subject is animate (see 1.2.3.2 and 1.3.2). Furthermore, as argued in 1.3.2 and 2.1.1, stage-level predicates like the one in (2-39b) are entirely compatible with the progressive. The French-Dutch bilingual, EMA, is the learner who produced most tokens of stative progressives (64). Interestingly, the one in (2-39c) would be equivalent to a French *imparfait*.

The influence of telicity and punctuality on past/perfect morphology was not so strong as predicted. Following Pinker and Prince (1991), Housen distinguished irregular morphology, acquired through associative rote-learning, from regular morphology, acquired through productive rule-learning (see 2.1). In his data, lexical aspect only seems to affect the latter but not the former. From a developmental perspective, rote-learning precedes rule-learning. This could also explain why the link between lexical aspect and verbal morphology was less strong in the L1-French learners than in the L1-Dutch learners. The former group was overall less proficient than the latter group and never reached the stage where they could use the regular past morphology productively.

(2-40) a. MAG5: uh no but my father and mother go there +... (ACC)
b. LEN4: And then we come back to the house. (ACC)
c. SAH5: but I have stop it +... (ACH)

By contrast, the L1-Dutch learners' applied past morphology productively without initial restriction to telic predicates.

(2-41) a. EVA1: and uh we eated@il. (ACT)
b. EMA1: and he heard uhm +... (STA)
c. FLU1: I liked it. (STA)

Housen also argued that learners are predisposed by the basic distinctions in their L1 tense-aspect system and look for similar distinctions in the L2 input. This is the case of the past/non past distinction. Different is the case of the progressive/nonprogressive distinction, since their native languages, French and Dutch, do not obligatorily encode progressive aspect. Here the learners would resort to conceptual prototypes and interpret the progressive as a marker of inherent durativity. However, although French and Dutch do not obligatorily mark the progressive/nonprogressive alternation, their tense-aspect systems are indeed different. Unlike Dutch, French encodes the perfective/imperfective distinction and, as shown in 1.1.2, progressiveness is a component of imperfectivity.

Using naturalistic L2 data collected by Wode (1981), Rohde (1996) analyzed the speech of two L1-German children, Lars (6) and Heiko (9). These children had learned L2 English during a six-month stay in California in1975. Their speech was tape-recorded and transcribed in a diary on a day-to-day basis for the entire stay. A type analysis showed a link between verb morphology and lexical aspect: past morphology, regular and irregular, is strongly associated with achievements (2-42a&b), although the irregular past also appeared with statives such as *was, saw, had.*

(2-42)	a.	Inga teared it apart.	(Heiko 2;2 – ACH)
	b.	I lost my shoe.	(Heiko 2;7 – ACH)

Statives are mostly encoded by the present inflection *–s*, which developed later than the progressive and the past.

(2-43)	a.	Who likes to fish?	(Lars 4;0 – STA)
	b.	Heiko knows how to do it.	(Lars 4;11 – STA)

Contra the predictions of the aspect hypothesis, the progressive appeared not only with activities (2-44) but also with achievements (2-45), although with the latter the time reference is future, not past. Three stative progressives (*loving, smelling, seeing*) are also reported.

(2-44)	a.	I think Birgit was kissing.	(Lars 4;4 – ACT)
	b.	What are you doing Craig?	(Heiko 1;17 – ACT)
(2-45)	a.	I'm coming down in a minute.	(Lars 4;27 – ACH)
	b.	I'm stealing.	(Heiko 1;18 – ACH)

Interestingly, these children's interlanguage displays an increasing morphological productivity, despite only a 6-month stay in the L2 country and a lack of formal instruction. This contrasts with the slow and gradual morphological development of the adult L2 learners described in 2.2.3.2.

The findings in Rohde (1996) appear to be at variance with those in Housen (1995). In the former, irregular and regular past forms are closely linked to achievements, whereas in the latter the correlation between telic predicates and past morphology is not so strong and mainly affects regular past forms. As to the progressive, it is distributionally biased towards activities in both studies, but in Rohde (1996) it is also strongly associated with achievements. The two studies show the links past-telicity and progressive-activities but the strength of the correlation varies. However, the comparison between the two studies could be hampered by the dissimilar learning profiles of the participants. It would be interesting to find out the extent to which language transfer can account for some of the differences exhibited by the two studies.

2.2.2.2 Child L2 Italian studies

The studies considered here present two different 'types' of acquisition, i.e. Italian as a second language vs. Italian is a heritage language.

Calleri (1992) investigated the acquisition of Italian temporal morphology in two Chinese six-year-olds that attended a primary school in Turin. The interviews took place over a year's time and consisted of semi-structured dialogues. SR, who arrived in Italy a year before, had 19 interviews and DZ, who arrived in Italy only two months before, had 17 interviews.

In both children's speech, the present and the infinitive were present since the beginning of the study. The present was the form that elicited most preferences and was used to describe actual as well as future situations and, aspectually, to mark durativity. The third person singular inflection was frequently overextended to the first. The infinitive alternated with the present but appeared to be restricted to durative predicates, as previously noticed by Berretta (1990) in the interlanguage of six learners (five adults and one child) from various L1s.

The past participle emerged early and occurred primarily with telic predicates (*finito* 'finished', *chiuso* 'closed', *fatto* 'done', *colorato* 'coloured', *tolto* 'removed', etc.). The morphology of the past participle is generally correct, with only two errors involving number agreement. The past participle alternates with the *passato prossimo*, which appeared in SR on the 6th interview and in DZ on the 9th one. The compound past is problematic for the children, who frequently produced forms such as *ha prendi* or *ha disegnare*, where the past participle is replaced by a present or an infinitive. Furthermore, the perfective auxiliary *essere* is overextended to *avere*. Finally, towards the end of the study, the *imperfetto* emerged with the modal function of counter-factuality. It is almost exclusively employed with *essere* and can generally be replaced by a conditional (SR14: *era qui questo* 'this one was here', while playing with a jigsaw; DZ13: *cos'era questa?* 'what was this one?').

Calleri (1992) concluded that the temporal system of the children consists of an opposition between unmarked forms (present and infinitive) and marked forms (past participle and *passato prossimo*). This opposition is initially aspectual and then temporal. Later, a modal opposition between present/past participle/*passato prossimo* and *imperfetto* is added. Furthermore, the children's temporal system seemed stabilized: two interviews carried out a year and a half later showed that although their interlanguage developed, their temporal morphology remained basically unchanged.

A comparison between the two Chinese children in Calleri (1992) and the four Chinese adults in Giacalone Ramat (1990 – see 2.2.1.2) shows that the children's temporal system is richer than the adults'. In fact the *imperfetto* is present in the children's interlanguage but not in the adults'. The comparison is particularly striking when noticing that at the beginning of the observation one child had been resident in Italy for only two months, whereas one adult had already been resident in Italy for four years. A potentially vitiating variable in this comparison is the role of instruction, since the children were attending a regular Italian school. But as the researcher herself concluded (Calleri 1992:440):

'L'uso della morfologia nel campo della temporalità non sembra l'ultima strategia a cui i soggetti fanno ricorso, poichè, seppur con una certa inerzia e con un maggior numero di errori che non gli apprendenti dell'italiano come L1, sono in grado dopo alcuni mesi di esposizione alla lingua italiana, di muoversi nella selezione dei morfi relativi a persona, numero e ancor più alle categorie di tempo/modo/aspetto, dando forma a un sistema coerente e stabile'.
[The use of morphology in the area of temporality does not seem to be the last strategy that these learners resort to, for, although with some idleness and with a major number of errors than the learners of L1 Italian, they are able, after a few months of exposure to Italian, to move about in the selection of morphemes related to person, number and even more to the categories of tense/mood/aspect, giving shape to a coherent and stable system.]

Thus, these child L2 learners appear to be more sensitive to the L2 temporal morphology than the adult L2 learners from the same L1. Similarly in 2.2.2.1, it was noticed how the morphological development of the child L2 learners in Rohde (1996) appears to progress fast. This relationship between child SLA and morphological productivity is worth investigating further because it could pinpoint a crucial difference between child and adult SLA.

If the study in Calleri (1992) fits the parameters of child SLA as outlined in 2.2.2, in Wiberg (1996), bilingualism, child SLA and, possibly, adult SLA are not easily distinguishable. Wiberg (1996) conducted a study on the reference to past events in 24 Italian-Swedish children aged between 8 and 17 years. All the children had an Italian and a Swedish parent and were born and live in Sweden. The researcher also collected L1 Italian data in Rome from ten secondary school children aged 10-14. In this baseline data, the type of discourse appears to affect the choice of predicate types marked by the *passato prossimo*. The *passato prossimo* occurs with both telic and atelic predicates in personal retellings (2-46) but when retellings turn into narratives, telic predicates are generally preferred (2-47).

(2-46) EVA: a Pitigliano quindi? (talking about the Christmas holidays)
'at Pitigliano then?'
AIO: mhm *è stato* un tempo abbastanza freschino no + ...
'it was [pass. pross.] a rather chilly weather, wasn't it'
EVA: mm.

AIO: eh invece *siamo rimasti* tutti a casa con gli amici. *Abbiamo giocato* # quello che si fa di solito a Natale in tutte le famiglie # *abbiamo giocato* a tombola a carte a poker. *Sono riuscito* un po' a guadagnare un po' di soldini diciamo.
'eh, we all stayed at home instead with the friends. We played, what you usually do at Christmas in every family we played bingo, cards, poker. I managed to earn some money let's say.'

(2-47) DLE: eh sì l'anno scorso a Natale mm la Vigilia *siamo andati* a cena fuori +...
'eh, yes, last year at Christmas mm at Christmas Eve we went out for dinner...'
EVA: mm.
DLE: +, eh mm *siamo tornati* verso mezzanotte l'una, diciamo.
'we came back at midnight, one o'clock let's say.'
EVA: mm.
DLE: il giorno dopo al mattino verso le cinque e mezza sei, io e mio fratello *ci siamo svegliati* mentre i nostri genitori dormivano e *siamo andati* ad aprire i regali.
'the day after in the morning around five-thirty six, I and my brother woke up while our parents were sleeping and went to open the gifts.'
EVA: hehe mhm mm.
DLE: poi *abbiamo svegliato* i nostri genitori e gli abbiamo dato i nostri regali.
'then we woke up our parents and gave them our gifts.'

Wiberg divided the L2 Italian children into four 'bilingual levels' according to their proficiency in the target language. The analysis of their spontaneous production elicited through partially planned dialogues revealed a predominance of the participle/*passato prossimo*, 253 tokens, over the *imperfetto*, 91 tokens. Past participles decrease with proficiency levels whereas the *passato prossimo* increases in the two upper levels, which also show a consistent use of the *imperfetto*. Furthermore, the most proficient learners moved from personal retellings to narratives, thus displaying the same discourse tendencies that Wiberg noticed in the Italian children.

(2-48) a. EVA: ah sì? E che hai fatto?
'yes? And what did you do?'
VER: eh # *giocato* # mm # *andato* a mare # e +... (Lev 1)
'eh # played [past participle] # mm # went [past participle] to the sea # and...'
b. EVA: e tu ci sei mai stata a Napoli?

'have you ever been to Naples?'

SIT: sì, *ho stata*. (Lev 2)
'yes, I have been [wrong auxiliary].'

c. EVA: e com'era lì?
'and what was it like there?'

AND: *era* bella # e *abbiamo visto* un gatto morto che *era* nell'acqua pure. (Lev 3)
'it was nice # and we also saw a dead cat that was in the water.'

d. TAM: ... io che *andavo* nel # che *dovevo* cominciare la quinta *avevo studiato* inglese un anno. *Sapevo* quasi meglio l'inglese che la mia professoressa. (Lev 4)
'I who attended the # who was going to begin the fifth studied English for a year. I almost had a better knowledge of English than my teacher.'

Wiberg argued that the *passato prossimo* represents a default past tense, used with all predicate types. On the other hand, support from the aspect hypothesis comes only from the restriction of the *imperfetto* to prototypical states such as *essere*. The link between the emerging *imperfetto* and *essere* is documented in other L2 Italian studies (Bernini 1990; Giacalone Ramat 1990, 1993, 1995).

One caveat in the study is the 'bilingual' status of the children, with Swedish being the dominant language and Italian being the weaker language. This nomenclature raises issues about the amount and the type of L2 Italian input the children were exposed to. These learners are heterogeneous with regard to their proficiency in Italian, ranging 'from more or less native-like to poor' (Wiberg 1996:1088) and with regard to their linguistic background in that they have one Italian parent whose place of origin in Italy varies. Furthermore, regional varieties of Italian differ in their usage of tense-aspect forms, as Wiberg herself acknowledges. Thus, the linguistic background of these children is a potentially vitiating variable, especially when addressing the aspect hypothesis, whose predictions apply primarily to early morphological development.

The heterogeneity of these 'bilingual' learners makes the comparison with Calleri (1992) difficult. Apart from typologically distant L1s, the participants in two studies differ in learning environments, amount and type of L2 exposure, L2 proficiency. In Calleri (1992), the most frequent form is the present tense whereas in Wiberg (1996) the most

frequent is the *passato prossimo*, which represents a default past tense. In the former study, the *passato prossimo* is less used than the bare past participle, which is mainly restricted to telic predicates. A similarity between the two studies is the late emergence of the *imperfetto* and its strong link to stative predicates, *essere* in particular. However, the *imperfetto* in Calleri (1992) generally expresses modality, whereas in Wiberg (1996) it expresses the background of narratives.

Like the child L2 English studies in 2.2.2.1, the child L2 Italian studies presented above do not analyze the potential role of the learners' L1 in the acquisition of L2 tense-aspect morphology. Another study in Italian as a heritage language is Rocca (1996), who, on the basis of the research conducted by Sorace (1993, 1995a, 1995b – see 1.3.1.1), investigated the phenomenon of auxiliary selection in 15 L1 English children aged between 7 and 11. The children were asked to describe in detail what they did the previous day. The unaccusative verb that appeared most frequently in the compound past was *andare*, that is out of 54 unaccusatives in the compound past 46 of them were represented by *andare*. The compound past of *andare* was constructed both with *avere* and the canonical auxiliary *essere*. With *avere*, the past participle remained unmarked, whereas with *essere* it agreed in gender and number with the subject, as shown in the table below.

Table 2.2.2.2: Correlation auxiliary - past participle agreement (Rocca 1996)*

	AVERE	ESSERE
[+] PP Agr	0	12
[-] PP Agr	14	0

* Unaccusatives with subjects other than masculine singular

This correlation is highlighted in the following excerpt from the seven-year-old Marco.

(2-49) **abbiamo** *andato* sotto abbiamo giocato nel playground
have.PRES.1pl go-PP-Msg downstairs have.PRES.1pl play-PP in.the
'we went downstairs, we played in the playground …'
quando hanno chiamato anno tre … **siamo** *andati* sopra a mangiare
when have.PRES.3pl call-PP year three be.PRES.1pl go-PP-1pl upstairs to eat-INF

'when they called year three, we went upstairs to eat...'
abbiamo *andato* sulle scale....
have.PRES.1pl go-PP-Msg up.the stairs
'we went up the stairs'.

Thus, the overgeneralization of *avere* as auxiliary is induced by a failure to mark the past participle for agreement with the subject. Since English is deprived of this morpho-synctactic feature, my hypothesis is that the L1 acts as a filter preventing the children from agreeing the past participle with the subject. Furthermore, the morphological marking of the past participle indicates an affected subject, which, as discussed in 1.3.1.1 and in 2.1, is considered as a marked subject choice since affectedness represents a prerogative of a prototypical object. The marked status of affected subjects combined with L1 influence would predispose the children towards leaving the past participle unmarked, and this would results in *avere* being overgeneralized. This will be further tested through the child L2 Italian data. Next, a detailed discussion on L1 influence.

2.2.3 Language transfer[9]

At the heart of second language research lies the assumption that learners create interlanguage, a dynamic, idiosyncratic language system distinct from both the L1 and the L2 but permeable to other linguistic systems known to the learner. Language transfer is considered as a central process in the definition of the 'interlanguage hypothesis' (Selinker 1972, 1992).

A widely quoted definition of language transfer is the one suggested by Odlin (1989:27):

'Transfer is the influence resulting from similarities and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired'.

Language transfer is a riddle: 'now you see it, now you don't' (Kellerman'1983:112). Teachers, who, like myself, have taught their native tongue for many years to learners

from various L1s, 'know' that transfer exists, but to the researcher the task of proving such an elusive phenomenon can be baffling and tantalizing.

That language transfer is difficult to prove has been known for a long time (Arabski 1979). Jarvis (2000) proposed a methodological framework for the investigation of L1 influence where three of its potential manifestations are considered. These types of evidence for language transfer are a) intra-L1-group homogeneity: learners from the same L1 exhibit similar interlanguage patterns when using the same L2; b) inter-L1-group heterogeneity: learners from different L1s exhibit dissimilar interlanguage patterns when using the same L2; c) L1-IL congruity: within the same learner, interlanguage and L1 exhibit parallel patterns. According to Jarvis (2000), each type of evidence is insufficient by itself to show language transfer and therefore at least two of these three types of evidence are required to corroborate it. Importantly, a parallel IL-L1 pattern has to be established.

For the study presented in this dissertation, I will attempt to show intra-L1-group homogeneity with the results I obtained and inter-L1-group heterogeneity by comparing them with the L2 studies reviewed in this chapter. As to L1-IL congruity, I felt that eliciting L1 data from the same L2 learners would exert a biasing effect on a longitudinal study. Therefore, to show the influence of the first language, I appealed to a new type of evidence that is both bi-directional and developmental. In 3.1, I will illustrate how I gathered this type of evidence. Next, I will review language transfer research in the areas of child SLA (2.2.3.1) and tense-aspect (2.2.3.2).

2.2.3.1 Child SLA and language transfer

The 'interlanguage hypothesis' (Selinker 1972) was first extended to child second language acquisition in Selinker, Swain and Dumas (1975), which investigated the role of language transfer in seven-year-olds educated in the French Immersion Program. French was the medium of instruction and the children, native speakers of English, were learning

it subsequently to their first language. Findings indicated that the children's output was influenced by language transfer (2-50a) as well as by other strategies such as simplification (2-50b), and overgeneralization of target language rules (2-50c).

(2-50) a. Elle *marche* les chats. (Causative meaning given to an intransitive verb)
she walk-PRES-3sg the cats
'She walks the cats'.

b. Il a *couré*. (Past participle modelled on most common inflection)
he have.PRES.3sg run-PP
'He ran'.

c. La fille *mettre* du confiture sur le pain. (Use of one default form for all tenses)
the girl put.INF DET jam on the bread
'The girls puts jam on the bread'.

The researchers concluded that the children's interlanguage was motivated by the absence of interaction with peers that were native speakers of the target language. The children were able to communicate successfully with each other using their interlanguage, but communication through it would have been more difficult with L1 French peers. Furthermore, Selinker and his colleagues noted that historically pidginization stemmed from absence of interaction with native speakers.

The influence of the first language was minimized by Dulay and Burt's (1974a) who investigated the acquisition of 11 functors in 60 Spanish and 55 Chinese children, aged between 6 and 8 years. Adopting the 'acquisition criterion' introduced in Brown (1973 - see 2.1.1), the researchers elicited L2 speech through the Bilingual Syntax Measure, which consisted of coloured pictures about which children were asked questions. This research design raised criticisms: since L2 learners often use forms in inappropriate contexts, considering only correct use in obligatory contexts miss out on their overall interlanguage system. Furthermore, cross-sectional studies fail to reveal individual variation in interlanguage development (Andersen 1977, 1978; Wagner-Gough & Hatch 1975; Rosansky 1976).

The sequence in which the Spanish and Chinese children acquired the English functors was virtually the same, but it differed significantly from that followed by L1 English children. For example, the regular past preceded the irregular past. The reverse order, i.e. irregular before regular, was found in the longitudinal study of a five-year old Japanese girl, Uguisu, observed over a period of 60 weeks (Hakuta 1974, 1976). *Contra* Dulay and Burt (1974a), Hakuta (1976:343) argued for the role of language transfer in the acquisition of grammatical morphemes. For example, the plural never reached the acquisition criterion and is the last functor of the acquisitional sequence because of transfer from Japanese. Again, there is a significant difference with L1 acquisition of English, where the plural marker is mastered very early, within stage II. Uguisu's late acquisition of the plural morpheme is contrasted with Martha's (Cadzen et al. 1975) early acquisition of the same morpheme. Martha is a five-year old native speaker of Spanish and, unlike Japanese, Spanish has a plural marker that is equivalent to the English one. Therefore, language transfer explains why the two children acquired this morpheme at a different rate.[10]

After reviewing the morpheme order studies, McLaughlin (1978:202-3) concluded that although language acquisition, first and second, is a unitary process, the role of language transfer cannot be ignored.

'In acquiring a second language, the individual uses the same strategies that are employed in acquiring a first language, although these strategies are now adapted to the second language so that the sequence of development reflects this language more than the first language. [...] This does not mean, incidentally, that interference and transfer errors are unimportant in second-language acquisition. There is some evidence that such errors are more frequent early in the process of second-language acquisition and when the particular construction to be mastered proves especially intractable'.

McLaughlin (1978) was referring to Wode (1976, 1977) who showed how the influence of the first language intersects with the developmental stages of the L2 English acquired by four German children in a naturalistic setting. Wode argued that L1 influence is constrained by developmental prerequisites in that for transfer to occur the relevant L2 forms have to emerge in the first place.

His evidence comes from the acquisition of negation. Initially, the children's negative constructions (*no sleep; no bread*) are not L1-influenced, as they are similar to those produced in L1 acquisition of English. Later, post-verbal negation appears with modals, auxiliaries and the copula (*that's no right*). At this stage, the children start to place the negative particle after main verbs, like they do in German, their L1 (*Everybody catch no fish*; *John go not to the school*). Wode (1976, 1977) suggested that transfer occurs when the interlanguage has reached a developmental stage that provides a 'crucial similarity measure'. This led Zobl (1980a) to argue for the selectivity of transfer along the developmental axis, a concept recently emphasized also by Hawkins (2001:75):

'L1 influence on rate of development occurs only at the point in the sequence where the particular property becomes relevant; for example, the fact that Spanish marks subject-verb agreement only speeds up the acquisition of subject-verb agreement in English by Spanish speakers in advanced stages of acquisition'.

Like Wode, Zobl (1980a, 1980b) considered the interaction between language transfer and developmental processes. According to Zobl, a non-target form which is developmentally induced by a structural feature of the L2 and, at the same time, compatible with a pattern in the learner's L1, promote transfer that may lead to the stabilization of the interlanguage. Furthermore, transfer is activated when a L1 structure is more congruent to Slobin's (1973) operating principles than the parallel L2 structure. One example is the overgeneralization of the canonical word order to preverbal clitics in the L2 French of English-speaking children (**je vois les* instead of *je les vois*) cited in Ervin-Tripp (1974), Selinker et al. (1975) and Harley and Swain (1978). However, the corresponding structure **I them see* was not found in the L2 English of French speakers. Similarly, Spanish-speaking children learning L2 English do not reproduce the pronominal OV order that is required by their L1 (Dulay and Burt 1974b).

English, like French and Spanish, displays SVO for nominal objects. Moreover, since English is strictly SVO, L1 French- or L1 Spanish learners are unable to find in the input a similarity with the pronominal OV order of their respective first language. This represents a barrier to transfer. On the other hand, the non-target SVO for clitics in

French interlanguage is motivated by a structural property of French (SVO with nominal objects) and English. Furthermore, even in child French preverbal clitics pose a serious acquisitional problem. In fact, L1 French children underproduce clitics and overproduce nominal objects with SVO, which, as Slobin (1981) pointed out, is the basic word order that children acquiring a first language universally master very early.

Andersen (1983:192), indicated that the example above is consistent with the *transfer to somewhere* principle, which preferably apply to free, invariant and functionally simple morphemes. Thus, a grammatical form or structure is transferred in the interlanguage if:

(1) natural acquisitional principles are consistent with the L1 structure *or* (2) there already exists within the L2 input the potential for (mis-) generalization from the input to produce the same form or structure (Andersen 1983:182).

Wode (1976, 1977), Zobl (1980a, 1980b) and Andersen (1983) suggested that transfer is induced by the learner's perceived similarities between the L1 and L2, an idea that goes back to Weinreich's (1953:7) 'interlingual identifications'. Transferability and language distance appear to be inversely proportional in that the more distant the source and the target language are, the less probable transfer is. 'The learner's *perception of language distance*' is what Kellerman (1983:114) labelled as '*psychotypology*'. Kellermann (1983:115) cites findings from child L2 acquisition of negation. Wode (1978) showed that a negative structure such as *Marylin like no sleeping* was produced by native speakers of German (Wode 1976, 1977) and Norwegian (Ravem 1968), both closely related to English, but not by native speakers of Chinese (Huang 1970) and Japanese (Milon 1974), both typologically unrelated to English.

Interacting with psychotypology is a second factor, namely the degree of markedness of a L1 form. Like psychotypology, markedness is inversely proportional to transferability in that the more a form is perceived as marked, the less transferable it is. Referring to the example L2 French example **je vois les* produced by L1 English children, Kellerman argued that L1 French and L1 Spanish learners of English do not transfer SOV for clitics because in their respective native language this represents a marked word order.

Conversely L1 English learners of French transfer SVO to clitics because it is perceived as unmarked. According to Kellerman (1983:120), this shows 'a directionality effect for transfer'. This is what I intend to investigate in my bi-directional study.

So far, the studies considered focussed on transfer of structures. Kellerman (1978, 1979) was to first to explore a lexical-semantic form of L1 influence by testing the transferability of the polysemous verb *breken* (break) in adult Dutch learners of English. 81% judged the meaning of *breken* translatable by *break* in *hij brak zijn been* (he broke his leg) but only by 9% considered the verb in *sommige arbeiders hebben de staking gebroken* (some workers have broken the strike) translatable by *break*[11]. Importantly for my study, Kellerman (1983:115) reported that similar results were obtained with Dutch schoolchildren learning ESL. Since both meanings of *break* are possible in English, learners appears to transfer what they perceive as prototypical meaning of a category, regardless of similarities between source and target language.

What the *breken* studies show is that learners assess their L1 for transferability regardless of the L2 input. The idea that transfer may not be induced by L1-L2 similarities and that L2 input can be ignored by learners led Kellermann (1995) to the formulation of the *transfer to nowhere* principle.

'This principle states that there can be transfer which is not licensed by similarity to the L2 and where the way the L2 works may very largely go unheeded; hence *transfer to nowhere*'. (Kellermann 1995:137)

Transfer to nowhere is complementary to *transfer to somewhere* (Andersen 1983), which focuses on the role of L2 input in the shaping of interlanguage. This takes us back to Odlin's (1989) definition of language transfer cited in the previous section. In fact, as Kellerman (1995:142) put it: 'transfer can now come about through similarity and difference'.

To sum up, in my view, the above discussion highlights two general factors that regulate transfer, a developmental factor and an iconic factor.

a. DEVELOPMENTAL FACTOR: transfer occurs if the L2 property that acts as transfer-carrier has emerged in the interlanguage, i.e. the learner has reached a point of development where a given linguistic property becomes relevant.
b. ICONIC FACTOR: L1 properties are transferable if their form-function relationship is transparent and consistent with natural L1 acquisitional principles.

On the basis of these factors, I predict that transfer of the prototypical links described typologically (1.3.1and ff.) and acquisitionally (2.1 and ff.) will occur in the children's interlanguage if the necessary developmental requirements are met. However, transfer will be visible if the L1 and the L2 diverge in the typological-acquisitional links they realize. Again, 'now you see it, now you don't' (Kellermann 1983:112 – see 2.2.3).

The research questions and hypotheses of this study are stated in 3.1. Next, I will consider the role of language transfer in the acquisition of tense-aspect.

2.2.3.2 Language transfer and tense-aspect

The role of language transfer in the L2 acquisition of tense-aspect is severely under-investigated. As noticed in the previous section, studies in language transfer focus mostly on structures. The two studies reviewed here address the issue of language transfer in adult L2 acquisition of English tense-aspect.

Flashner (1989) analyzed the English narratives of three native speakers of Russian with limited L2 instruction. She found that their tense-aspect system was characterized by the basic past/ nonpast opposition: the regular and irregular past forms encoded perfective aspect, whereas the base form encoded imperfective aspect. Furthermore, the past/nonpast alternation correlated with the foreground/background discourse distinction (Hopper 1979 – see 1.1) in that past morphology expressed the foreground of narratives, whereas the base form expressed the background.

In (2-51), Nina, one of the participants, narrates the story of *Dr* Zhivago by Boris Pasternak. Following the researcher's own coding conventions (Flashner 1989:86), foregrounded events are highlighted in italics and noted by alphabetical lettering at the beginning of the sentence.

(2-51) j. And she *said* Antypov
what Komarovsky do with her.
And Antypov is worried.
Not he like Lara.
k. And he *married*.
l. A [but] Dr Zhivago married the profession's [professor's] daughter"

Flashner (1989) attributes the learners' use of past morphology for perfective contexts and the base form for imperfective contexts to transfer from their L1 since in Russian the perfective is the morphologically marked member of the perfective/imperfective distinction. According to the author (Flashner 1989:96): 'this research argues for the existence of systems in interlanguage which reflect a form-function correspondence with the learner's native tongue'.

Form-function relations are at the heart of Slobin's research (see 2.1). He extended the concept of 'thinking for speaking'(Slobin 1991, 1996; Berman & Slobin 1994b), according to which a language influences the way its speakers conceptualize experience, to adult second language acquisition (Slobin 1993b) and inspired Kellerman's (1995) *transfer to nowhere* (see 2.2.3.1).

Slobin (1993:247) distinguished between general cognitive categories such as plurality, and categories of 'thinking for speaking', which having *'no direct reflection in one's perceptual, sensori-motor, and practical dealings with the world'* are impervious to restructuring when learning another language and therefore more prone to transfer. Tense-aspect marking is defined as a 'thinking for speaking' category.

The problem here is where to draw the line between language and cognition. Even accepting that plurality is cognitively more deep-rooted than tense-aspect, languages vary considerably in their expression of plurality: English has plural suffix, Chinese has none, Arabic distinguishes between singular, dual and plural. Furthermore there are studies suggesting that the L1 can influence the acquisition of the English plural morpheme, as shown by the comparison between Martha and Uguisu in the previous sub-section.

Drawing on the L2 English corpus from the ESF project, Slobin argued that Italian speakers acquire past forms quickly because Italian being a tense-prominent language every verb needs to be marked deictically in relation to the time of utterance. Conversely, Punjabi being aspect-prominent, Punjabi speakers overuse progressive forms because they narrate events from an imperfective viewpoint, paralleling the use of imperfective aspect in their native tongue.

As far as I can see, the L2 data that Slobin refers to do not appear to support his claims. Reporting on the acquisition of English by three L1 Italian speakers (Santo, Andrea and Rudolfo), Huebner et al. (1992:120) stated that: 'Past forms are a relatively minor and unsystematic phenomenon'. According to Dietrich et al. (1995), only two of the four Italian learners progressed beyond the basic variety, namely Andrea and Lavinia. Andrea's morphological development surfaced 10 months after the beginning of the observation, which started 6 months after his arrival in England, when he had just finished a 4-month ESL course for 10 hours a week.

Even the most proficient L1 Italian learner of English in the ESF project (Perdue 1993), Lavinia, produced the first regular past (*explained*) after a year's stay. In her interlanguage, the past inflection started to become productive after 14-15 months' stay. It should be pointed out that at the beginning of the study, Lavinia was enrolled in a clerical English language skills course, not to mention a child attending an English nursery school, which gave her plenty of opportunities to interact with native speakers. Summing up Lavinia's interlanguage development, Perdue (1993:95) defined it as 'slow and gradual' with respect to morphological marking of tense-aspect.

Thus, I could not find any evidence for Slobin's claim that Italian speakers acquire English past-tense forms quickly. As to the Punjabi learners, they indeed overuse the progressive but

'the semantic distinction does not appear to be "perfective" vs. "imperfective", and the distribution of the forms can clearly not be accounted for in terms of "foreground" vs. "background": many V+*ing* forms seem to warrant a punctual (rather than iterative) interpretation, and occur in utterances that push to plot forward'. (Huebner et al. 1992:120)

Thus, contrary to Slobin's claim, the overuse of the English progressive does not seem to be related to the expression of imperfectivity in Punjabi. As to the Italian learners, they use the progressive as an imperfective marker of durativity.

Indeed, the interlanguage of Italian and Punjabi learners seem to diverge. Some of the formers appear to learn past morphology earlier than the latter; the two groups also differ in their use of the progressive and in the scaffolding of their narratives. This 'inter-L1-group heterogeneity' is a potential manifestation of language transfer but by itself it is not sufficient as a demonstration of transfer (Jarvis 2000). A main objective of this dissertation is to show a bi-directional effect of transfer in the acquisition of tense-aspect morphology.

As far as I understand it, there is also an incongruity within the concept of 'thinking for speaking' itself. Another 'thinking for speaking' category is implied in the distinction between 'satellite-framed' and 'verb-framed' languages' (Talmy 1985). Germanic languages are *satellite-framed* in that motion verbs conflate movement and manner (*walk, swim*) with path encoded by verb particles, which are satellites to the verb (*walk* IN, *swim* ACROSS). Conversely, Romance languages are *verb-framed* in that motion verbs conflate movement and path (*entrare, scendere*) with the optional expression of manner supplied by a gerund or a prepositional (*entrare correndo, scendere con un salto*). Path is more central to the motion event than manner is.

'Children learning satellite-framed languages make early and abundant use of directional particles, whereas children learning verb-framed languages make early and abundant use of verbs of motion – for describing the same situation' (Slobin 1993:245)

Slobin (1993) reported on similar patterns found in the adult SLA studies conducted by the ESF researchers. More specifically, in the earliest stages, adult L2 learners of German use directional particles alone, without verb, to express path (e.g. away from source *raus, weg*; upward *auf*), like children acquiring L1 German do. By contrast, adult L2 learners of French use verbs alone (e.g. away from source *sorti, parti*; upward *monté*), like children acquiring L1 French do. Thus, with regard to this pattern, adult SLA recapitulates first language acquisition. However, as mentioned above, the distinction satellite-framed versus verb-framed is a 'thinking for speaking' category, and as such, according to Slobin, it should be impervious to restructuring. Instead, this particular 'thinking for speaking' category appears to be prone to restructuring in the L2, unlike other 'thinking for speaking' categories, such as tense-aspect marking. What is left to explain is why certain 'speaking for speaking' categories are more likely to be restructured than others are.

In sum, Flashner (1989) and Slobin (1993) indicate that the form-function relations in the L1 tense-aspect system constrain the learner's acquisition of the L2 tense-aspect system. The concept of transfer as a constraint on the types of hypotheses that the learner can formulate about the L2 was originally proposed by Schachter (1983). If the L1 predisposes the learner towards certain options and not others, this means that the learner would look for L1 features in the L2, a view that is consistent with the one previously advanced in Corder (1973).

'The phenomenon of transfer will reveal itself in the attempt to realize in the second language the semantic features of his message in the same way as in his mother tongue'. (Corder 1973:284)

Applied to the L2 acquisition of tense-aspect, this view of language transfer suggests that the learner would look for L1 form-function relations in the L2 and would try to express them resorting to the L2 tense-aspect forms that appear to be most similar to those in the

L1. Language transfer differentiates second from first language acquisition. Importantly, Slobin (1993) points to another crucial difference between first language acquisition and adult SLA, namely the developmental rate of grammatical inflections.

'When a grammatical inflexion is perceptually salient, and mappable onto an available conceptual relation, it becomes part of the child's productive repertoire in the initial phases of grammatical development' (p.241-242).

Conversely, in the ESF study, the morphological development of the adult learners is more gradual and slow: they all reached the pre-morphological stage of the 'basic variety', but only half of them progressed beyond that within the 30-month observation period.

As stated in 2.2.2, child SLA is a bridge between first language acquisition and adult SLA. In 2.2.2.1 and 2.2.2.2 it was noticed how the interlanguage of some child L2 learners displays morphological productivity within a relatively short period of time, especially when compared to adult L2 learners. If substantiated, this observation could show a convergence between first language acquisition and child SLA that differentiates both of them from adult SLA. Of course, variables related to L2 exposure need to taken into account, i.e. whether the L2 is acquired in the country where it is a L1 or not, whether the L2 input is naturalistic or instructed or both. If legitimate grounds for comparison can be found, I will investigate whether the child L2 learners of my study are more similar to child L1 learners or to adult L2 learners with respect to morphological development.

CONCLUSION

In the previous chapter, the analysis of the English and Italian tense-aspect system led to the identification of prototypical links between temporal morphology and lexical aspect: past/perfective with telic predicates, progressive with activities and imperfective with statives. In this chapter, these prototypical links find acquisitional legitimacy within the

framework of the 'aspect hypothesis', which associates emergent verb morphology with the lexical aspect of the predicate. The predictions of the 'aspect hypothesis' are generally substantiated in both first and second language acquisition. However, stative progressives represent the bone of contention, in that they are mostly absent in first language acquisition but are reported in second language acquisition. I argue that stative progressives can be accounted for as an effect of language transfer. More generally, I argue for the transferability of prototypical links. Language transfer takes the shape of a filter, a predisposition that constrains the range of options available to the learner.

The longitudinal-bidirectional design of the study serves the purpose of showing the working of language transfer in child second language acquisition, which partakes of both first language acquisition and adult second language acquisition. Keeping the focus on children, the transfer research considered indicates that developmental and iconic factors regulate the influence of the first language on the acquisition of a second one. The aim of my study is to shed light on a morpho-semantic dimension of language transfer in the interlanguage of learners that still have the potential of becoming native speakers. Next, I will illustrate how I conducted this study.

NOTES

[1] Recently, Slobin (2001) has challenged his own theory. In the light of great cross-linguistic diversities in the expression of grammaticizable notions, he argued that it is not plausible to attribute the origin of language acquisition to semantic -or syntactic- predispositions. Instead, Slobin (2001:442) suggests that 'in the course of development the child comes to attend to particular types of meaning and expect them to be expressed by particular types of forms'. This is the 'typological bootstrapping' (p.441), a corollary of which is 'thinking for speaking' (p.442). The role of 'thinking for speaking' in its implications for language transfer is discussed in 2.2.2.1.

I still believe that assuming semantic predispositions in language acquisition *is* plausible. Although languages are indeed different, the fact that even typologically distant languages can generally be compared implies the existence of similarities –at least partial. One example of this is Dahl's (1985) cross-linguistic survey of tense-aspect typologies. I think that the problem with Slobin's (1985a) operating principles is their tendency to be *ad-hoc*: in my opinion, they would benefit from a theoretical tightening up – and a wielding of Occam's razor.

[2] In a recent development of the Language Bioprogram Hypothesis, Bickerton (1999:59) argued for 'default settings of semantic parameters' in the acquisition of creole tense-aspect morphology.

[3] I am indebted to Janusz Arabski and Piotr Mamet for helping me understand the complexity of these examples.

[4] Brown (1973) distinguished language development into five stages according to the children's average utterance length, namely the mean length of utterance (MLU), which is calculated by dividing the total number of morphemes per utterance by the total number of utterances. Up to 4.0, MLU is a reliable predictor of language development, because the length of an utterance indicates its complexity. Beyond that point, the complexity of an utterance is more related to the context because the children have become linguistically more competent. As shown below, MLU increases with age.

STAGE	MLU	APPROXIMATE AGE
I	1.0 – 2.0	1;0 – 2;2
II	2.0 – 2.5	2;3 – 2;6
III	2.5 – 3.0	2;7 – 2;10
IV	3.0 – 3.75	2;11 – 3;4
V	3.75 – 4.5	3;5 – 3;10
V+	4.5	3;11+

[5] The fact that similar developmental sequences are observed in adult SLA (2.2.1) rules out a maturational explanation for adult learners.

[6] This datum was pointed out in Pizzuto & Caselli (1994) after a reanalysis of the data in Pizzuto and Caselli (1992)

[7] Similarly, although within a generative framework, Borer & Wexler (1992) argued that in child Italian participle phrases are analyzed as adjectival passives.

[8] I disagree with the classification of *go to the managers* as a punctual predicate, since it satisfies the diagnostics for durativity and telicity that defines accomplishments (see 1.2.3.3).

[9] Throughout this dissertation, the terms 'language transfer' and 'L1 influence' are used interchangeably.

[10] The same effect of language transfer on the acquisition of the English plural marker is observed in adult Japanese and Spanish speakers (Hawkins 2001:246-7)

[11] Kellermann (1983) also noticed that the intransitive form of *break*, as in *the cup broke*, was highly rejected, despite having a Dutch equivalent in *het kopje brak*. This rejection is motivated by the learners' perception of intransitive *break* as marked in relation to transitive/causative *break* in *he broke his leg*. This reminds us of Slobin's (1985a) Manipulative Activity Scene (see 2.1) and its mapping on the canonical word order SVO in the early stages of L1 acquisition. Interlanguage, like child language, reflects iconic principles of semantic transparency. 'Using the notion of iconism to mean transparency, regularity and isomorphism, the L2 learner is from this point of view an icon-maker, even more than the child acquiring his first language' (Berretta 1995:221)

CHAPTER 3

METHODOLOGICAL PROCEDURES

INTRODUCTION

The findings reported in this study are based on the analysis of speech samples from six children, three Italian boys learning English and three English girls learning Italian[1]. These samples were collected over a period of twelve months, i.e. six months per group of learners, and subsequently transcribed, coded and analyzed. This chapter illustrates the learners' profiles (3.2) and discusses the methodological procedures adopted in the collection of the data (3.3) and their analysis (3.4), with particular attention to issues related to transcription (3.4.1) and coding (3.4.2). The chapter will start with a statement of the research questions and hypotheses that have guided this bi-directional study (3.1).

3.1 RESEARCH QUESTIONS AND HYPOTHESES

The main objective of this research is to observe the development of tense-aspect morphology in a bi-directional study involving two typologically different languages, Italian and English. Chap.1 presented a theoretical overview of tense-aspect typology in these two languages. The focus was on grammatical aspect and lexical aspect, the interaction of which generates the following prototypical links: simple past/*passato prossimo*-telics, progressive-activities, *imperfetto*-states. In Chap.2, these typological prototypical links found acquisitional support within the framework of the 'aspect hypothesis, which applies both to first and second language acquisition. The comparison between findings in both L1 and L2 studies highlighted certain interlanguage patterns that are absent or rather marginal in first language acquisition: overproduction of the progressive with states, underproduction of the *imperfetto*, overgeneralization of the

perfective auxiliary *avere*. In my view, these patterns could be induced by language transfer.

For the purposes of this study, *language transfer* is defined as a constraint that the L1 imposes on the L2 options available to the learner (see 2.2.3.2). Specifically, the constraints investigated here refer to the L1 tense-aspect system and how it predisposes the learner towards producing certain interlanguage forms. I hypothesize that the typological similarity between the progressive and the *imperfetto*, both belonging to the imperfective area, would result in a bi-directional effect of transfer. The progressive would be overextended to states because the learner would transfer the prototypical link *imperfetto*-states; similarly, the *imperfetto* would be underextended to states because the learner would transfer the prototypical link progressive-activities, resulting in an underproduction of the *imperfetto* with states. However, as argued in 2.2.3.1, language transfer would occur when the learner has reached the necessary point of development. In other words, these patterns of overextension and underextension would manifest themselves after the relevant L2 prototypical links have been acquired. Thus, before being overgeneralized to states, the progressive would first mark activities. Similarly, the *imperfetto* would first appear with states, before being avoided with them.

As to the overgeneralization of *avere*, it could be argued that it is the result of transfer from the English present perfect auxiliary 'have'. As illustrated in 1.1.1.2, the *passato prossimo* and the present perfect share the notion of 'current relevance' (Comrie 1976:52), which represents the prototypical meaning of both of them. However, like the simple and unlike the present perfect, the *passato prossimo* also functions as a past tense. Past reference is exactly what the L2 Italian children used the *passato prossimo* for. This means that their use of the *passato prossimo* does not reflect the use of the present perfect in their native tongue. Therefore, although the present perfect and the *passato prossimo* share morphological and functional similarities, a link IL-L1 is difficult to substantiate in this case. Furthermore, even assuming that the children transfer the present perfect auxiliary 'have', this cannot not explain the correlation auxiliary selection-past participle agreement. I would argue that the overgeneralization of *avere* is brought about by a

failure to agree the past participle with the subject because of L1 influence. The phenomenon relating *essere*-selection to past participle agreement is not reflected in an English equivalent. Therefore, this 'absence' would prevent the learners from expecting this specific morpho-syntactic feature in the target language. Furthermore, past participle agreement indicates an affected subject, which, being a marked category, can represent a problem for the L2 learner.

To show language transfer, parallel L1-IL patterns have to be established. To serve this purpose, I will resort to intra-L1-group homogeneity, and, when applicable, inter-L1-group heterogeneity (Jarvis 2000 – see 2.2.3). I will also introduce a new type of evidence that is both bi-directional and developmental. This is how I gathered it. Firstly, a description and a comparison of the linguistic property under investigation are provided for two languages from both a typological and a L1 acquisitional standpoint. Thus, in Chap.1, I analyzed English and Italian tense-aspect systems constrastively and, in Chap.2, I described the acquisition of tense-aspect morphology in child English and in child Italian. This procedure allows the linguistic property to be defined not only with regard to its function but also with regard to the developmental path that leads to its mastery, since first language acquisition is 'the' successful route to acquisition: *ceteris paribus*, all children become native speakers of a language. Most importantly, language transfer is absent in first language acquisition.

This typological and acquisitional background represents a constant against which the L2 data will be disentangled. Thus, the developmental path of a L2 learner is compared with that of a child acquiring the same language as L1. In my study, the longitudinal child L2 English data will be compared with the findings from L1 English acquisition illustrated in 2.1.1 and similarly, the longitudinal child L2 Italian data will be compared with the findings from L1 Italian acquisition illustrated in 2.1.2. If the comparison highlights divergences linkable to a pattern in the L2 learner's native tongue, this would provide evidence for L1 influence at the point where it intersects with L2 development and leads the learner off the 'successful' track normally followed by a L1 acquirer of that language. What is assumed here is that language acquisition, whether first or second constitutes a

unitary phenomenon (McLaughlin 1978 – see 2.2.3.1) and, as to tense-aspect morphology, this assumption appears to be substantiated by the similarities between L1-L2 acquisition found throughout Chap.2. However, the fundamental difference between first and second language acquisition lies in language transfer, which is absent in the former but present in the latter.

Thus, interlanguage development is related to two L1s: the L1 acquisition of the language that is learned as L2 and the native tongue of the L2 learner. Since this two-way comparison requires evidence from two L1s, this is what bi-directionality provides, with a reversible L1-L2 relationship where the two languages represent both the source and the target. Furthermore, as shown in 2.2.3.1, bi-directionality is crucial in pinpointing the direction of language transfer.

What makes the transfer issue more interesting is the focus on child L2 learners. As pointed out 2.2.2, child SLA overlaps with first language acquisition and adult second language acquisition. Like children acquiring their native tongue, child L2 learners are 'morphologically sensitive' (2.2.2.1, 2.2.2.2, 2.2.3.2). However, like adult L2 learners, child L2 learners have already acquired a native tongue; therefore, language transfer could impact on their acquisitional process. A comparison with both L1 and adult L2 developmental patterns points to child SLA as distinctive area of investigation.

To recapitulate, the research questions (Q) and hypotheses (H) that motivate this study are:

Q1. How are child L2 tense-aspect forms acquired?

H1.1. There are prototypical links between tense-aspect morphology and lexical aspect: simple past/*passato prossimo*-telicity; progressive-activity; *imperfetto*-stativity.

H1.2. These prototypical links are transferable when the necessary developmental conditions are met.

Q2. What are the developmental patterns exhibited by child L2 English learners?

H2.1. The progressive first occurs with activities and later is overextended to states.

H2.2. The simple past, both regular and irregular, first occurs with telic predicates, later spreads to activities and finally to states.

Q3. What are the developmental patterns exhibited by child L2 Italian learners?

H3.1. The *imperfetto* first occurs with states, then spreads to activities and later is underproduced with states.

H3.2. Perfective forms, i.e. bare past participle and compound past, first occur with telic predicates, later spread to activities and finally to states.

H3.3. The perfective auxiliary *avere* is overgeneralized.

H3.4. The perfective auxiliary *essere* emerges later and with telic predicates.

H3.5 Auxiliary selection and past participle agreement are correlated.

Q4. What are the similarities and dissimilarities between child SLA and L1 acquisition?

H4.1. Like L1 learners, child L2 learners are characterized by morphological sensitivity.

H4.2 Unlike L1 learners, child L2 learners are influenced by language transfer.

Q5. What are the similarities and dissimilarities between child SLA and adult SLA?

H5.1 Like adult L2 learners, child L2 learners are influenced by language transfer.

H5.2 Unlike adult L2 learners, child L2 learners are characterized by morphological sensitivity.

Next, I will detail the methodology I adopted to answer these questions and test these hypotheses. I will start with a profile of the participants.

3.2 PARTICIPANTS

The participants in this study are three pupils of the European School in Culham (England) and three pupils of the European School in Varese (Italy). Both for technical reasons and to secure the anonymity of the individuals, each child is referred to by a three-letter code; this is followed by a number indicating the session when the recording took place. DAN, MAT and BER are the Italophone learners; LOU, FER and HEL are the Anglophone learners. They are all normal children with no physical, cognitive or social deficiencies and they all come from a middle class background. Parents' permission for participation in this study was obtained in writing.

The first group of learners is composed of two boys aged 7 (DAN, MAT) and one boy aged 8 (BER). They are native speakers of Italian born in Northern Italy from Italian-speaking parents. They had no previous knowledge of English before moving to England. At the beginning of the study, MAT had been resident in the UK for 6 months, DAN and BER for one year and a half. They were receiving L1 Italian instruction and learning English as L2 at beginners' level. Their teacher maintained that their L2 proficiency was very similar. Despite residential discrepancies, the children appeared to be homogeneous as to their proficiency level in English and their L1 background. Therefore, I decided that they were suitable to take part in the study.

The second group of learners is composed of two girls aged 8 (FER, HEL) and one girl aged 7 (LOU). They are native speakers of English born in England from English-speaking parents. LOU, FER and HEL had no previous knowledge of Italian before moving to Italy. They were receiving L1 instruction but they learned French, and not Italian, as L2. FER and HEL also attended one 45-minute lesson per week of Italian, an optional course offered by the school. FER was in her second year, HEL in her first. From the point of view of their L2 Italian learning, it is plausible to define it as naturalistic, certainly more naturalistic than the L2 English learning of the other group.

Before starting the European School, FER and HEL attended a local nursery school ('scuola materna') for approximately a year; LOU attended it only for few months. Thus, from the point of view of L2 Italian exposure, LOU had less than FER and HEL. At the beginning of the study, they all had been resident in Italy for 4 years and 9 months.

The two groups differ as to the length of time they have been resident in the L2 country. The L2 Italian children had been in Italy longer than the L2 English children had been in England. However, the learning environment is also dissimilar: naturalistic for the former, naturalistic as well as instructed for the latter. Also, since Italian only encodes aspectual distinctions in the past, learners need to reach a certain level of proficiency before the relevant tense-aspect forms, i.e. *passato prossimo* and *imperfetto*, could be investigated. In fact, as shown in 2.2.1.2 and 2.2.2.2, the *imperfetto* constitutes late acquisition. Therefore, on the basis of previous L2 Italian studies, I made a principled assumption that the acquisition of Italian tense-aspect distinctions in naturalistic learners, with no L2 instruction, would occur later than in instructed learners.

Within each group the residential requirement is rather consistent, the only exception being MAT who had been in England for six months when the study started. To control for transfer effects, the participants in the study had to be monolingual. In fact, all the children speak their L1 at home and had no previous knowledge of the L2 before leaving their native country. As to L2 Italian children, although at school their L2 was French, whose tense-aspect system is typologically similar to Italian, they never learned French before starting primary school; furthermore, they never practiced it outside school lessons. Interestingly, no French code-switching was ever noticed in their Italian interlanguage.

Finally, a fundamental criterion in the selection of the participants was their availability and the willingness and the enthusiasm of the children to take part in the research.

3.3 DATA COLLECTION PROCEDURE

3.3.1 Set-up of the sessions

The study is bi-directional and longitudinal. English and Italian were chosen both as source and target languages because they are typologically different while still being familiar to me – a native speaker of Italian who is also a fluent and proficient speaker of English. Each child took part in 15 sessions over a period of 6 months. The L2 English group was observed from March 1998 to September 1998, whereas the L2 Italian group was observed from October 1998 to April 1999. As evident from the schedule below, the sessions took place at 1-2 week intervals, except for a 4-week interval between S13 and S14 in the L2 English group and a 3-week interval between S7 and S8 in the L2 Italian group. The summer holidays of the L2 English children and the Christmas holidays of the L2 Italian children justify the length of these two intervals.

Table 3.1: Schedule of data-collections sessions

	L2 ENGLISH GROUP	L2 ITALIAN GROUP
S1	4 March 1998	7 October 1998
S2	18 March 1998	21 October 1998
S3	1 April 1998	4 November 1998
S4	22 April 1998	18 November 1998
S5	29 April 1998	25 November 1998
S6	6 May 1998	2 December 1998
S7	20 May 1998	16 December 1998
S8	3 June 1998	7 January 1999
S9	10 June 1998	20 January 1999
S10	24 June 1998	3 February 1999
S11	1 July 1998	17 February 1999
S12	15 July 1998	3 March 1999
S13	29 July 1998	17 March 1999
S14	26 August 1998	31 March 1999
S15	4 September 1998	7 April 1999

I conducted all the sessions outside school hours and in the respective children's homes. This was part of a general attempt to set the children at ease, the assumption being that in

their natural environment, they would be free from tension or anxiety and more willing to co-operate. I was introduced to them as a teacher with whom they could further their practice of the target language. Before starting the recording sessions, I met with the children to familiarise with them and to show them how the 'lessons' would be structured. Explanations were given in their native language, to make sure the instructions were clear. Sessions were recorded on cassette audiotapes using a Sony TCM-359V with a built-in microphone[2]. The tape-recorder was placed as close as possible to the children and they were encouraged to speak loud and clear. Children's speech can often be elliptical and this could create problems in a study that mainly focuses on morphology: endings could be blurred, making data ambiguous.

It was thus felt that a relaxed atmosphere was essential to the success of the study. To build up such an atmosphere of familiarity and informality, I often played games with the children before or after the sessions. During the sessions a game-like approach to the tasks was adopted in order to make the interaction pleasurable and as productive as possible. I always sat next to the children rather than opposite. On the whole, they participated with interest to the tasks and never felt uncomfortable with the set-up of the sessions.

3.3.2 Structure of the sessions

The structure of the sessions was devised so as to elicit the most relevant data respecting children's limited attention span. Each session lasted approximately 30-40 minutes and consisted of three parts. The first part served as a warm-up to elicit free production about any past events related to the children's everyday life. They were asked questions like: "What did you do today/yesterday/last weekend/at Christmas/at Easter/ during the summer holidays?" Often, it was not even necessary to ask questions. As the study went on, the children became more familiar with the structure of a session and knew that it would start off with spontaneous conversation where they could say what they want,

provided it was about something that happened already. As a general rule, the researcher waited for the child to start the interaction and if this did not happen, then questions like those above were asked. In any case, a deliberate attempt was made to keep questions to the minimum so that the children's speech could be as natural as possible.

The second part of the session was a guided retell task based on Walt Disney or Warner Bros. animated cartoons. A video was shown for a few minutes without sound. The same silent fragment was shown a second time, but this time the researcher introduced some key vocabulary and verbs in the base form. At the end of the video, the children were supposed to retell what they had seen. In order to help them with this task, the researcher produced cards with sentences containing in brackets the verbs in the base form that were previously supplied during the video. These cards were laid out in front of the children and they could resort to them if they wanted to. The researcher asked questions or prompted the children by starting a sentence that they then had to complete providing a predicate.

(3-1) a.

```
*INV: so # in the beginning # uh what did the tree do?
*MAT2:      the tree wash # its face.
*INV: and the mushroom?
*MAT2:      the mushroom uh dancing +...
*MAT2:      +, and the tree playing uh the harp.
```

b.

```
*INV: allora # uh raccontami cosa hai           visto.
      well        tell.me    what have.PRES.2sg see.PP
      'Well, tell me what you saw.'
*INV: l'  albero +...
      the tree
      'the tree...'
*HEL2:      ++ lavato  la  faccia.
                wash-PP the face
               'it washed its face.'
*INV: il  fungo?
      the mushroom
      'the mushroom?'
```

```
*HEL2:      ballava.
            dance-IMPF-3sg
            'it was dancing.'
*INV: l'  albero?
      the tree
      'the tree?'
*HEL2:      suonava       l'  arpa.
            play-IMPF-3sg the harp
            'it was playing the harp'.
```

The third part of the session was a cloze task based on picture stories from popular child literature. The task was called 'the beep-game'. The children were shown a series of pictures twice. The second time the researcher introduced some key vocabulary and verbs in the base form, like in the guided retell task. Similarly, the cards showing the sentences with the verbs in the base form were laid out in front of the children, then the pictures were removed from the children's sight. After a few minutes the researcher read the sentences aloud saying 'beep' instead of the verb in the base form. The child had to replace the 'beep' with a word that would make the sentence intelligible and the cue was the verb in brackets. The children sometimes produced a whole sentence, other times they only supplied the missing verb.

(3-2) a.

```
*INV: yesterday Rosie [beep] to the pond.
*DAN5:      Rosie walked to the pond.
*INV: Foxie [beep] Rosie.
*DAN5:      Foxie following Rosie.
*INV: Foxie [beep] into the pond.
*DAN5:      Foxie fell into the pond.
```

b.

```
*INV: ieri      Rosie [beep] fino.al lago.
      yesterday              to.the  lake
      'yesterday Rosie [beep] to the pond.'
*LOU5:      camminato.
            walk-PP
            'walked'
*INV: Foxie [beep] Rosie.
```

```
*LOU5:      seguiva.
            follow-IMPF-3sg
            'was following'
*INV: Foxie [beep] nel    lago.
                    in.the lake
      'Foxie [beep] into the lake'.
*LOU5:      caduto.
            fall-PP
            'fell'
```

The structure of the sessions shows a gradual move from a more spontaneous form of elicitation to a more controlled one. A multi-faceted data collection procedure provides a more complete picture of a learner's interlanguage, because speech samples are elicited from different kind of tasks. It is important to elicit natural data where learners are not constrained in their speech production but it is also important to ensure comparability of results across learners and cross-linguistically. Bearing that in mind, the researcher devised this type of sessions, with both spontaneous conversation and more controlled tasks where the children were presented with verbs in the base form for English and in the infinitive for Italian. The same material was used in both English and Italian, presented according to the same sequence of sessions.

When the children resorted to their native tongue, the researcher either provided the lexical item in the target language or signaled she had understood. This was done so that the conversation or the narration would not be hampered by the learner's inability to express a word in the target language. When the word in question was a verb or a verb phrase, the researcher only provided the base form or the infinitive, as in the example below:

(3-3)
```
*DAN5: the policeman uh ha@l1 [:= has] trovato@l1 [:= found]+...
*INV:  ++ uh # trovare@l1 is find +...
*DAN5: uh finded the pie.
```

Every effort was made to ensure that every phase of the sessions ran as smoothly as possible with no strain on the children.

3.4 DATA ANALYSIS

3.4.1 Transcription

A total of 90 sessions were tape-recorded. Immediately after each session, notes were made about extra-linguistic information (e.g. gestures) produced during the session or about any other information which seemed relevant for a correct interpretation of the data but which would not be transparent from the recordings themselves. These notes turned out to be very helpful for disambiguation during later transcription. The data have been organized according to participant, session and task. The author transcribed all the sessions.

The transcription system used is CHAT (Codes for the Human Analysis of Transcripts), developed by the CHILDES (Child Language Data Exchange System) Project (MacWhinney 1995). The aim is to produce computerized transcripts of face-to-face interaction that allow for subsequent automatic analysis by a series of computer programmes for speech analysis called CLAN (Computerized Language Analysis). Although originally developed for the study of L1 acquisition, SLA researchers, speech pathologists and discourse analysts increasingly use these instruments. Access to and permission to use CHAT and CLAN were obtained from the CHILDES organisation.

The interactions between the researcher and the participants have been transcribed in Microsoft Word files in text-only format, following the CHAT guidelines. Great pain was taken in transcribing the children's speech in detail, including phenomena like pauses, fillers, retracings, repetitions, interruptions and the like. In addition to the linguistic data, the transcriptions also contain annotations and comments deemed necessary for a correct

interpretation of the utterances. For example, referents of deictics are identified, and relevant extra-linguistic information indicated (e.g. gestures). Also indicated are L1 expressions, onomatopoeias and idiosyncratic interlanguage forms.

Phonetic transcription was used in the case of ambiguous spelling (e.g. [red] vs. [ri:d] for *read*) or ambiguous pronunciation: the L2 English children sometimes pronounced *run* and *ran* in the same way, i.e. [ran], identifying both [ʌ] and [æ] with the Italian vowel [a][3]. These cases were coded but discarded from further analysis.

(3-4) *INV: and the little devil?
*DAN11: uh the little devil uh ran [= ran@u] away.

An excerpt from the conversation with DAN and LOU in the first session is given below, illustrating the most commonly used transcription conventions and symbols (a full list is presented at the beginning of this dissertation).

(3-5) a. *INV: uh what did you do yesterday?
*DAN1: uh yesterday I go to J.
*INV: uhuh # and what did you do there?
*DAN1: I eating.
*INV: uhuh what did you eat?
*DAN1: couscous.
*INV: uhm I see uh uh did you like it?
*DAN1: more.
*INV: what else did you do?
*DAN1: uh Javil buy uh # stamps for me.
*INV: uhuh and then?
*DAN1: I see a frog.
*INV: where?
*DAN1: uh in the garden.

b. *INV: uh allora # mi racconti la tua giornata?
well DAT tell-PRES-2sg the your day
'well can you tell me about your day?'
*LOU1: uh prima # mi svegliata.

```
                first   REFL wake-PP-Fsg
                'first I woke up'
*INV: uhm uhm.
*LOU1:      uh dopo vestito.
                then dress-PP
                'then I got dressed'
*INV: uhm uhm.
*LOU1:      dopo va          uh a  mangiare.
                then go.PRES-3sg    to eat
                'then I went to eat'
*INV: uhm uhm.
*LOU1:      uh dopo mette uh        la  scarpa +...
                then put.on-PRES-3sg the shoe
                'then I put my shoes on'
*LOU1:      +, e   dopo va          a  scuola.
                and then go.PRES-3sg to school
                'and then I went to school'
*INV: uhm uhm.
*LOU1:      dopo fa          matematica +...
                then do.PRES-3sg mathematics
                'then I did mathematics'
*LOU1:      +, e  uh dopo  va          a  francese +...
                and   after go.PRES-3sg to French
                'then I went to the French class'
```

When transcribing data, an element of selection and interpretation is almost inevitable, especially in the case of non-proficient speakers whose pronunciation is often unstable and unclear. Particular attention had to be paid to potential cases of phonetic assimilation, such as *He drop/dropped the box* or *He/He's singing*. Cases like these were naturally disambiguated if the child inserted a pause between the words that could be assimilated. In the absence of a pause, these cases were excluded from further analysis.

3.4.2 Coding

The next step in the data analysis was the coding. This is the most crucial analytical and often also the most speculative step. In fact, the coding represents the first stage in the analysis. The investigation of the research questions and hypotheses formulated in 3.1 requires quantification of the data. In order to allow for computerized quantification and analysis, a coding system had to be developed which was compatible with the CLAN software.

Since the main focus of the study is the relationship between verb morphology and lexical aspect, the coding was carried out at two levels:

1. Identification of verb forms.
2. Identification of verb classes.

These features were coded on separate coding lines (called *dependent tiers*) underneath the line with the actual speech (the *independent* or *main tier*). The following are fully coded extracts:

(3-6) a.
```
*INV: what happened at the beginning?
*BER7:      it snowing.
%for: $V:snow-PROG
%las: $ACT:snow
```

b.
```
*BER7:      uh Bambi discovered uh the snow.
%for: $V:discover-PAST
%las: $ACH:discover
```

(3-7) a.
```
*INV: raccontami cosa hai           visto  nel    video.
      tell.me    what have.PRES.2sg see.PP in.the video
      'tell me what you saw in the video'
*INV: all'   inizio +...
      at.the beginning
      'at the beginning...'
*FER7:      ++ nevicava.
                 snow-IMPF-3sg
               'it was snowing.'
%for: $V:nevic-IMPF:3S:IMPRS
%las: $ACT:nevicare
```

b. *INV: e Bambi?
'and Bambi'
*FER7: uh scoprito la neve.
discover-PP the snow
'he discovered the snow.'
%for: $V:scopr-PP
%las: $ACH:scoprire

The codes are spread over two coding tiers. The first tier, indicated with *%for* (for *form*), characterizes the morphological properties of a verb that occurs in a given clausal unit. The second tier, indicated by *%las* (for *lexical aspect*) identifies the lexical aspectual properties of the predicate. These categories will be operationalized in 3.4.2.1 and in 3.4.2.2.

The following cases were coded but discarded from the analysis:

1. Negative sentences: when a negative operator is applied to a predicate, by implication it also negates the lexical aspectual class that the predicate belongs to. In other words, a negation of a predicate indicating an activity, i.e. *John did not play football yesterday*, implies a negation of the activity itself, in this case the playing of football, which did not take place (for a related discussion on temporality and negation see Klein 1994:48-58).
2. Predicates indicating non-past reference: the linguistic expression of present and/or future reference is irrelevant to the purposes of this study, which investigates the acquisition of temporal morphology with regard to past time reference.
3. Copula *be/essere* and predicates with *have got/avere*: this study focuses on the distribution of tense-aspect morphology with main verbs only. The irregular paradigms of copula *be/essere* and of *have got/avere* represent an idiosyncratic case that also receives a great amount of consideration in L2 teaching.

Finally, verbs sharing the same form for past and base (e.g. cut, hit) were excluded from coding and further analysis.

3.4.2.1 *The coding of verb forms*

The coding of tense-aspect is captured by the $V code in the *%for* tier, where verbs were classified according to the morphological properties exhibited in the children's interlanguage. Verb categories were taken from descriptive treatments of English and Italian grammar (Huddleston 1984; Quirk et al. 1985; Serianni 1989; Dardano & Trifone 1995). Three grammatical verb types were distinguished: main verbs, copula verbs (COP) and auxiliary verbs (AUX). Only for intransitives in the compound past, it was also indicated whether, in the standard language, they would select *essere* (E), *avere* (A) or both (A/E). The following tags, adapted from MacWhinney (1995) represent the verb forms transcribed:

ENGLISH

- V : base form
- V-3S : 3rd singular present
- V-PROG : progressive
- V-PAST : regular past
- V&PAST : irregular past

ITALIAN

- V-INF : regular infinitive
- V&INF : irregular infinitive
- V-PRES : present tense
- V-PP : regular past participle
- V&PP : irregular past participle
- V-IMPF : regular *imperfetto*
- V&IMPF : irregular *imperfetto*

COMPOUND VERB FORMS:
- AUX+V
- AUX+V-PROG
- AUX+V-PP
- AUX+V&PP

However, it is often difficult to fit interlanguage data into traditional grammar categories without distorting the data themselves. In fact, because of the idiosyncratic nature of interlanguage (see 2.2.3), the imposition of a target language perspective creates a 'comparative fallacy' (Bley-Vroman 1983; Lakshmanan & Selinker 2001). The general rule applied in this work was to code 'visible' data, focusing on what is 'there' rather than on what could be speculatively inferred or postulated. This approach was also adopted in the glosses and translations in English of the L2 Italian examples. Specifically, the goal of these translations was to adhere as faithfully as possible to what the children actually said and to render their discourse in English with the language that English-speaking children like them might have used in similar circumstances[4].

Elements belonging to the predicate were coded in their actual order of appearance. Negations (NEG) and pronouns (direct, indirect and reflexive: PRO) were also included in the coding.

(3.8) a.
```
*INV: what did Paul do?
*MAT5:      Paul uh maked the pie +...
%for: $V:make-PAST
```

b.
```
*INV: uhm e   il  cuoco?
            and the cook
      'and the cook?'
*LOU5:      fatto uh la  torta.
            make.PP    the pie
            'he made the pie'
%for: $V:fare&PP
```

(3.9) a.
```
*INV: uhm did you enjoy your holiday?
*DAN15:     yes uh I liked it a lot.
%for: $V:like-PAST
```

b.
```
*FER7:Ho            piaciuto molto mio vacanze a  Natale.
      have.PRES.1sg like-PP  a.lot my  holiday at Christmas
      'I liked my Christmas holidays a lot'
```

```
%for: $V:AUX|avere&PRES:1S+V:piac-PP:E
```

(3.10) a.
```
*BER13:     he fell from the mountain.
%for: $V:fall&PAST
```

b.
```
*HEL13:il  bambino ha            caduto  della  montagna.
       the boy     have.PRES.3sg fall-PP of.the mountain
      'the boy fell from the mountain.'
%for: $V:AUX|avere&PRES:3S+V:cad-PP:E
```

Coding data often involves crucial and arbitrary decisions. The coding criteria adopted in the *%for* tier analyze the children's developing tense-aspect forms with the goal of being as learner-oriented as possible. Obviously, since the attention of the researcher tends to be attracted by deviant, non-native forms, the target language perspective can not be ruled out.

3.4.2.2 The coding of verb classes

Lexical aspect is coded in the *%las* tier, characterized by the four Vendler's (1967) classes (see 1.2.2ff), which are used here as coding categories: states ($STA), activities ($ACT), accomplishments ($ACC) and achievements ($ACH). The assignment of a predicate to a given lexical aspectual class is based on the verb in the bare form or in the infinitive, because, as discussed in Chap.1, grammatical and lexical aspect should be kept separate. Hence, the following parallel examples would all receive the same classification, namely *accomplishment:*

(3-11) a. Yesterday John wrote a letter.
a'. Ieri Gianni ha scritto una lettera.
b. At 3:00 p.m. John was writing a letter.
b'. Alle 3:00 Gianni scriveva una lettera.
c. John writes a letter every day.
c'. Gianni scrive una lettera ogni giorno.

Each predicate is assigned to one of the four lexical aspectual classes according to the operational tests adapted from Dowty (1979), Van Valin & LaPolla (1997) and Bertinetto (1997) *inter alia*, but also according to contextual and extralinguistic information. The four lexical aspectual classes are described individually in 1.2.3. The relevant diagnostic tests are summarized below for convenience.

Test 1: State or non-state (stative vs. dynamic)?

a) Does the predicate yield a habitual interpretation in the simple present? (N/A to Italian)

If no → State (e.g. *I like jazz; I know you* = also now at the moment of utterance)

If yes → Non-state (e.g. *I smoke cigars* = habitually, but not at the moment of utterance)

→ Test 2

b) Can the predicate occur with the progressive?

If no → State (e.g. * *Mary is knowing the answer/ *Maria sta sapendo la risposta*)

If yes → Non-state (e.g. *John is singing/ John sta cantando*) → Test 2

Test 2: Activity or non-activity (atelic vs. telic)?

a) Can the predicate occur with *'in X time/ in X tempo'*?

If no → Activity (e.g. *Mary danced *in two hours/ Maria ha ballato *in due ore*)

If yes → Non-activity (e.g. *The ice melted in an hour/ Il ghiaccio si è sciolto in un'ora*)

→ Test 3

b) Does *'X is Ving'* entail *'X has Ved'* without an iterative/habitual meaning? In other words *'If you stop in the middle of Ving, have you achieved the act of V?'* (cf. the 'imperfective paradox' in 1.3.2)

If yes → Activity (e.g. *run in the park/ correre nel parco)*

If no → Non activity (e.g. *run home/ correre a casa)* → Test 3

Test 3: Accomplishment or achievement (durative vs. punctual)?

a) If *'X Ved in Y time'*, then *'X was involved in Ving during that time'?*

If yes → Accomplishment (e.g. *Mary did his homework in ten minutes/ Maria ha fatto il compito in dieci minuti = He was doing his homework during those 10 minutes)*

If no → Achievement (e.g. *John found the key in ten minutes/ Gianni ha trovato le chiavi in dieci minuti ≠ He was finding the key during those 10 minutes)*

b) Is there semantic ambiguity with *almost*? (N/A to Italian)

If yes → Accomplishment (e.g. *Mary almost baked a cake* has two meanings: *she almost started to bake a cake* and *she almost finished baking a cake)*

If no → Achievement (e.g. *John almost died* has only one reading)

These operational tests combined with the descriptive criteria of each individual class provided the basis for a principled and systematic classification. The following excerpts illustrate some actual coding decisions:

(3-12) a.
```
*INV: Jasper [beep] his bean.
*DAN3:      like his bean.
%las: $STA:like
```

b.
```
*INV: a  lui [beep] il  suo fagiolo.
      to him        the his bean
      'he [beep] his bean'
*HEL3:      piaceva.
            please-IMPF-3sg
            'liked'
%las: $STA:piacere
```

(3-13) a.
```
*INV: then?
*MAT7:      uh Bambi walking in the snow.
%las: $ACT:walk
```

b.
```
*INV: e   poi Bambi +...
      'and then Bambi…'
*LOU7:      ++ camminava     nella  neve.
               walk-IMPF-3sg in.the snow
            'he was walking in the snow'
%las: $ACT:camminare
```

(3-14) a.
```
*BER13:     he uh climbed the mountain.
%las: $ACC:climb
```

b.
```
*FER13:     poi  ha            scalato  la montagna.
            then have.PRES.3sg climb-PP the mountain
            'the he climbed the mountain'
%las: $ACC:scalare
```

(3-15) a.
```
*INV: the flour [beep] over Foxie.
*MAT6:      the flour fell uh over Foxie.
```

```
%las: $ACH:fall
```

b.
```
*INV: la  farina [beep] sopra.a Foxie.
      the flour        over
      'the flour [beep] over Foxie.'
*LOU6:      caduto.
            fall-PP
            'fell'
%las: $ACH:cadere
```

Table 3.2 lists some frequent predicates in the bi-directional data.

Table 3.2: Frequent predicates coded for lexical aspect

STATE	ACTIVITY	ACCOMPLISHMENT	ACHIEVEMENT
BELONG	CRY	BUILD + def. O	ARRIVE
APPARTENERE	*PIANGERE*	*COSTRUIRE*	*ARRIVARE*
FEEL	DANCE	CROSS + def. O	COME
SENTIRE/SENTIRSI	*BALLARE*	*ATTRAVERSARE*	*VENIRE*
KNOW	DO/MAKE	CLIMB + def. O	DIE
CONOSCERE	*FARE*	*SCALARE*	*MORIRE*
LIE + inanimate S	EAT	COME + direct. P	DISCOVER
GIACERE	*MANGIARE*	*VENIRE*	*SCOPRIRE*
LIKE	FLY	DO/MAKE + def. O	ESCAPE
PIACERE	*VOLARE*	*FARE*	*SCAPPARE*
LIVE	JUMP	DRINK + def. O	EXPLODE
VIVERE	*SALTARE*	*BERE*	*ESPLODERE*
LOOK	LAUGH	EAT + def. O	FALL
SEMBRARE/PARERE	*RIDERE*	*MANGIARE*	*CADERE*
NEED	PLAY	FLY + direct. P	FIND
SEE	*GIOCARE*	*VOLARE*	*TROVARE*
VEDERE	RUN	GO + direct. P	FINISH
SEEM	*CORRERE*	*ANDARE*	*FINIRE*
SEMBARE/PARERE	SING	MELT	LEAVE
WANT	*CANTARE*	*SCIOGLIERE/RSI*	*PARTIRE*
VOLERE	SLEEP	READ + def. O	OPEN
	DORMIRE	*LEGGERE*	*APRIRE*
	SMILE	RUN + direct. P	START
	SORRIDERE	*CORRERE*	*COMINCIARE*
	SWIM	SING + def. O	STEAL
	NUOTARE	*CANTARE*	*RUBARE*
	TALK	SHOW + def. O	STAND UP
	PARLARE	*MOSTRARE*	*ALZARSI*
	WALK	WRITE + def. O	WAKE UP
	CAMMINARE	*SCRIVERE*	*SVEGLIARSI*

CONCLUSION

After listing the research questions and hypotheses that motivate this bi-directional study, this chapter presented the methodology applied to conduct the research. From the participants' profiles to the procedures for the collection, transcription and coding of the interlanguage data, the chapter illustrated the rationale underlying the methodological choices adopted by the researcher. The aim of such a discussion on methodological procedures is to provide a sound basis for the interpretation of the findings and the evaluation of their theoretical implications. The next chapter will detail the analyses and the results of the study.

NOTES

[1] The choice of the participants' gender was purely accidental. Since no study has ever indicated that gender affects the acquisition of tense-aspect forms, this variable was not controlled for.

[2] My original intention was to use a video camera but, since some parents did not allow me to, I decided to opt for an audio tape-recorder for all the participants.

[3] CHAT does not support the IPA alphabet but uses its own ASCII-based phonetic alphabet called UNIBET.

[4] These translations were checked out with a native English-speaking linguist.

CHAPTER 4

ANALYSES AND RESULTS[1]

INTRODUCTION

This chapter falls in three sections: the first two illustrate the analyses conducted on the L2 English (4.1) and L2 Italian data (4.2), the last one (4.3) compares the results obtained with the two groups of learners. Following Bardovi-Harlig (2000), two analyses were carried out using raw scores and percentages: an *across-category* analysis (4.1.1 and 4.2.1) and a *within-category* analysis (4.1.2 and 4.2.2). Tokens and percentages are presented for each individual learner in each of the 15 sessions. The across-category analysis focuses on the learner's use of verbal morphology and on its spread across the four lexical aspectual categories. However, this type of analysis is affected by the frequency of tokens in lexical aspectual classes (Robison 1995). This sensitivity to the number of tokens produced is controlled through the within-category analysis, which portrays the development of the verbal morphology in each lexical aspectual category.

The across-category analysis I performed concentrates on the acquisition of the verb forms that constitute the topic of the dissertation as detailed in the previous chapters. These verb forms are: the irregular past (4.1.1.1), the regular past (4.1.1.2) and the progressive (4.1.1.3) for L2 English; the bare past participle (4.2.1.1), the compound past (4.2.1.2) and the imperfect (4.2.1.3) in L2 Italian. As to the compound past, the issue of auxiliary selection is also dealt with. The base form in L2 English as well as the infinitive and the present tense in L2 Italian were ignored for the across-category analysis since, by being the most basic forms, they do not show acquisition of tense-aspect morphology. However, they were considered for the within-category analysis, so as to present a complete picture of the morphological development within each lexical aspectual class, i.e. states (4.1.2.1; 4.2.2.1), activities (4.1.2.2; 4.2.2.2), accomplishments (4.1.2.3; 4.2.2.3) and achievements (4.1.2.4; 4.2.2.4).

4.1 L2 ENGLISH DATA

4.1.1 Across-category analysis

The verb forms produced by the L2 English children are: the base form, the irregular past, the regular past and the progressive. These are quantified in the table below.

Table 4.1. Number of L2 English verb tokens

	DAN	MAT	BER	TOTAL
BASE	76	88	102	266
IRR PAST	105	80	144	329
REG PAST	121	126	119	366
PROG	111	108	98	317
TOTAL	413	402	463	1278

The verb forms investigated through the across-category analysis are: the irregular past, the regular past and the progressive. This approach analyzes the spread of these verb forms across the four Vendlerian classes. Table 4.2 displays the number of tokens employed in this analysis. The base form will not be considered here but will be included in the within-category analysis, which depicts morphological development (see 4.1.2).

Table 4.2. Number of L2 English tokens in the across-category analysis

	DAN	MAT	BER	TOTAL
IRR PAST	105	80	144	329
REG PAST	121	126	119	366
PROG	111	108	98	317
TOTAL	337	314	361	1012

Next, I will describe the spread of these three verb forms, starting from the irregular past.

4.1.1.1 The irregular past

Table 4.3: SPREAD OF IRREGULAR PAST

DAN

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
ACT	0	0	0	0	0	0	0	0	1	2	0	2	2	0	1
ACC	0	1	3	8	3	5	4	5	5	7	8	4	3	5	5
ACH	0	1	0	1	4	2	4	4	1	2	2	3	2	1	2
TOT	0	2	3	9	7	7	8	10	7	11	11	9	7	6	8

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	####	0	0	0	0	0	0	10	0	0	9.09	0	0	0	0
ACT	####	0	0	0	0	0	0	0	14.3	18.2	0	22.2	28.6	0	12.5
ACC	####	50	100	88.9	42.9	71.4	50	50	71.4	63.6	72.7	44.4	42.9	83.3	62.5
ACH	####	50	0	11.1	57.1	28.6	50	40	14.3	18.2	18.2	33.3	28.6	16.7	25

MAT

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
ACT	0	0	0	0	0	1	0	0	1	1	0	0	1	0	1
ACC	0	1	0	1	2	4	8	5	9	4	2	3	7	2	1
ACH	0	1	2	0	2	4	2	2	0	1	1	1	4	2	2
TOT	0	2	2	1	4	9	10	7	10	7	3	4	12	5	4

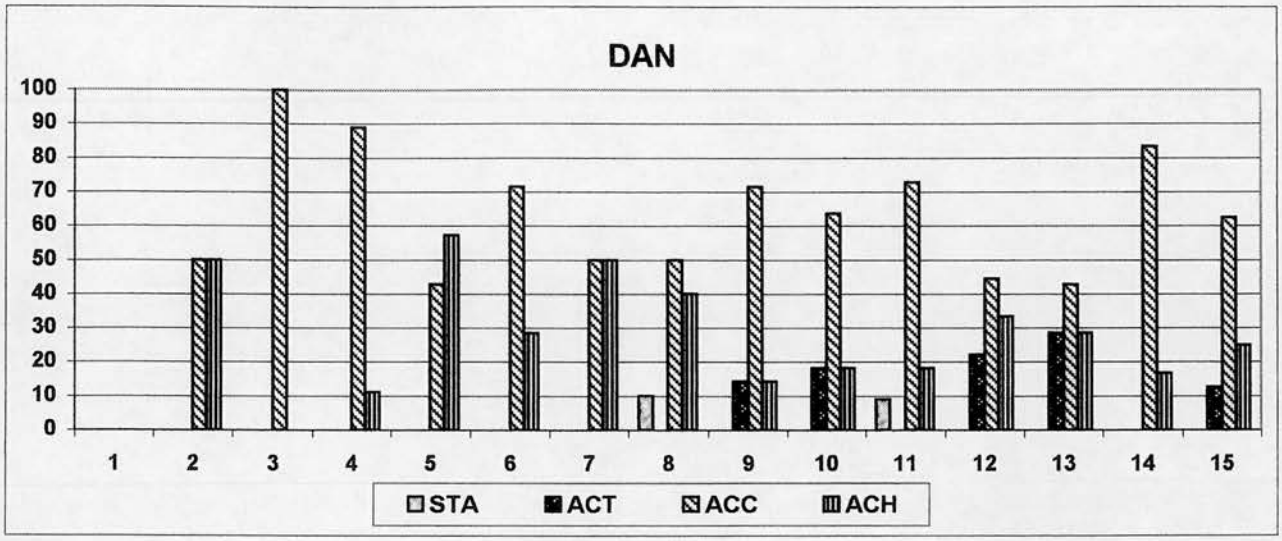
%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	####	0	0	0	0	0	0	0	0	14.3	0	0	0	20	0
ACT	####	0	0	0	0	11.1	0	0	10	14.3	0	0	8.33	0	25
ACC	####	50	0	100	50	44.4	80	71.4	90	57.1	66.7	75	58.3	40	25
ACH	####	50	100	0	50	44.4	20	28.6	0	14.3	33.3	25	33.3	40	50

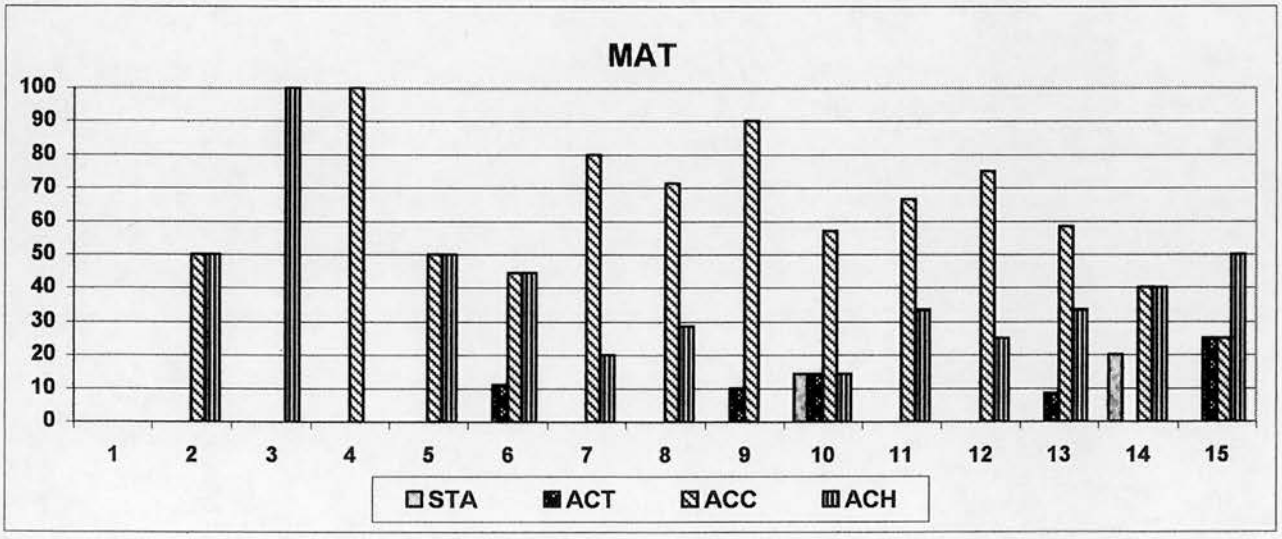
BER

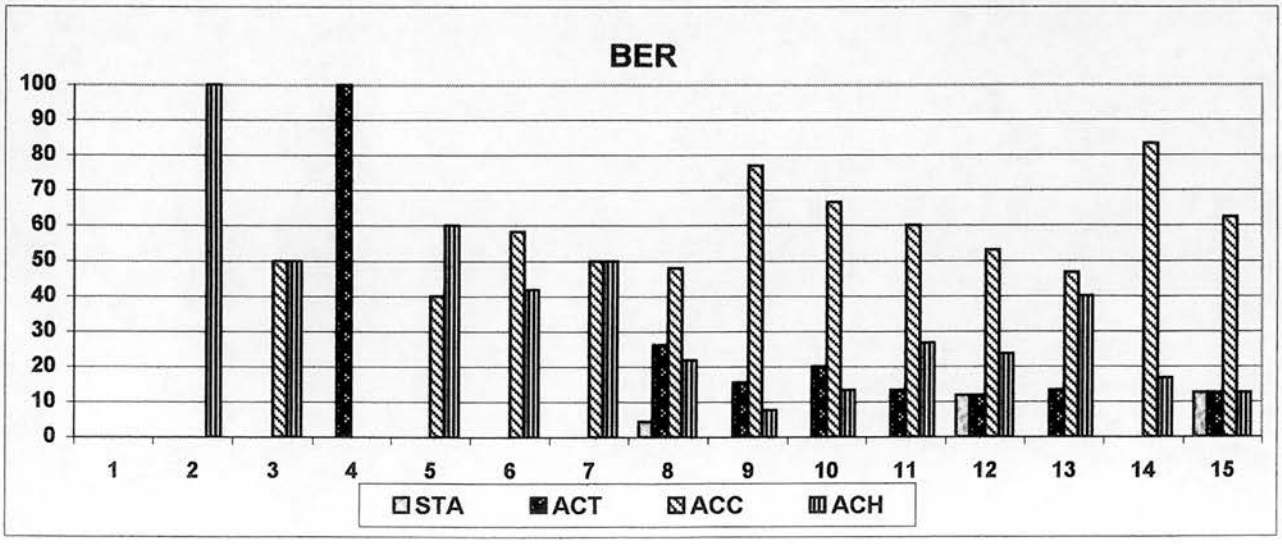
N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	0	1	0	0	0	2	0	0	1
ACT	0	0	0	1	0	0	0	6	2	3	2	2	2	0	1
ACC	0	0	1	0	2	7	5	11	10	10	9	9	7	5	5
ACH	0	2	1	0	3	5	5	5	1	2	4	4	6	1	1
TOT	0	2	2	1	5	12	10	23	13	15	15	17	15	6	8

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	####	0	0	0	0	0	0	4.35	0	0	0	11.8	0	0	12.5
ACT	####	0	0	100	0	0	0	26.1	15.4	20	13.3	11.8	13.3	0	12.5
ACC	####	0	50	0	40	58.3	50	47.8	76.9	66.7	60	52.9	46.7	83.3	62.5
ACH	####	100	50	0	60	41.7	50	21.7	7.69	13.3	26.7	23.5	40	16.7	12.5

Figure 4.1: SPREAD OF IRREGULAR PAST (%)







Starting in S2, the production of irregular past forms is generally associated with telic predicates, especially accomplishments, which usually consist of motional predicates followed by a directional phrase, such as *went* in (4-1), *came* in (4-2) and *ran* in (4-3). *Went* is the most frequent accomplishment in the irregular past (67/196); it is present in every session in the children's spontaneous production.

(4-1) a. DAN2[2]: last Friday I went to the Valley of the White Horse.
b. MAT4: the second day I went to the Model Village.
c. BER7: last Saturday I went to Greenwich
and I see the Cutty Sark.
d. DAN13: last Friday I went to a party.
e. MAT14: we went to London.
f. BER15: three weeks ago I went to Monviso.

(4-2) a DAN6: he came back home today.
b. MAT8: then we came back home
and playing with his friend Rudy.
c. BER11: then I came back home
and I eating.

(4-3) a. DAN7-MAT7: Foxie ran up to the hill.
b. DAN13-BER13: they ran to Neil.
c. BER13: we ran into the pond.

Other accomplishments in the irregular past include actions followed by a defined/quantified object such as *did* in (4-4), *made* in (4-5) and *ate* in (4-6).

(4-4) a. MAT2: today we did the play Matilde.
b. DAN9-MAT9-BER9: he did his shopping.
c. DAN15: I did my homework.

(4-5) a. DAN9-BER9: Snow White made a cake.
b. MAT9: Snow White made a pie.
c. DAN10-MAT10-BER10: he made a snowman.

(4-6) a. DAN4: I ate sausage.
b. MAT6-BER6: the mouse ate the hay.
c. MAT13: we ate a big ice-cream.

The irregular past with achievements indicates an instantaneous change, which can be a change in location, i.e. *fell* (4-7), *left* (4-8), or a change in state/condition, i.e. *woke up* (4-9), *found* (4-10), *lost* (4-11).

(4-7) a. DAN2-BER2: the old tree fell.
b. MAT5: Foxie fell into the pond.
c. DAN8: the plane fell.
d. BER14: I got on the bike and fell down.

(4-8) a. MAT2: the truck left.
b. BER13: we left at nine.
c. MAT14: she arrived after my cousin left.

(4-9) a. DAN7: Bambi woke up.
b. BER8: at seven o'clock Paddington woke up.
c. DAN10-MAT10-BER10: Snow White woke up.

(4-10) a. BER3: last Friday Jasper found a bean.
b. DAN12-BER12: the soldier found a bomb.
c. MAT12: today I found a dragonfly in the garden.

(4-11) a. MAT13-BER13: the boy lost everything.
b. BER13: I fell in it
because I lost my balance.

The irregular past spreads to activities only to a minor extent: it first appears with activities in S4 for BER, in S6 for MAT and in S9 for DAN. Activities in the irregular past, which are not present in every session, include *verba dicenda* like *said* (4-12)[3],

processes with an unquantified object such as *ate* in (4-13), and motional verbs like *ran* (4-14).

(4-12) a. BER4: he said funny things.
b. DAN10-MAT10-BER10: Snow White said goodbye.

(4-13) a. MAT6: I ate pasta.
b. BER9: we ate
and at nine o'clock we went to bed.
c. DAN12: I ate pizza and lasagne.

(4-14) a. BER11: we ran.
b. DAN13-MAT13-BER13: the boy ran after Bugs Bunny.

The extension of the irregular past to states occurs very marginally from S8 in DAN and BER and from S10 in MAT. The irregular past is only found with states that indicate perception, i.e. *saw* (4-15) and *felt* (4-16).

(4-15) a. DAN8: I saw the plane.
b. MAT10: we saw a lot of beautiful fish.
c. BER15: I saw the source of Po.

(4-16) a. BER12: last Sunday I felt sick.
b. BER12: Bugs Bunny felt sorry.

In sum, throughout the study, the irregular past is principally found with telic predicates, namely accomplishments.

4.1.1.2 The regular past

Table 4.4: SPREAD OF REGULAR PAST

DAN

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
ACT	0	0	0	0	0	1	1	2	2	2	1	4	3	4	5
ACC	1	0	0	2	1	5	1	3	3	1	2	10	6	6	9
ACH	1	1	3	2	1	2	4	1	1	3	2	6	5	6	6
TOT	2	1	3	4	2	8	6	6	6	6	5	21	14	16	21

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	0	0	0	0	0	4.76	0	0	4.76
ACT	0	0	0	0	0	12.5	16.7	33.3	33.3	33.3	20	19	21.4	25	23.8
ACC	50	0	0	50	50	62.5	16.7	50	50	16.7	40	47.6	42.9	37.5	42.9
ACH	50	100	100	50	50	25	66.7	16.7	16.7	50	40	28.6	35.7	37.5	28.6

MAT

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
ACT	0	0	0	0	0	1	0	0	0	1	2	5	2	4	4
ACC	0	0	0	4	3	3	3	3	3	4	4	9	6	7	10
ACH	1	2	1	2	3	0	2	2	2	5	6	8	0	6	6
TOT	1	2	1	6	6	4	5	5	5	10	12	23	8	17	21

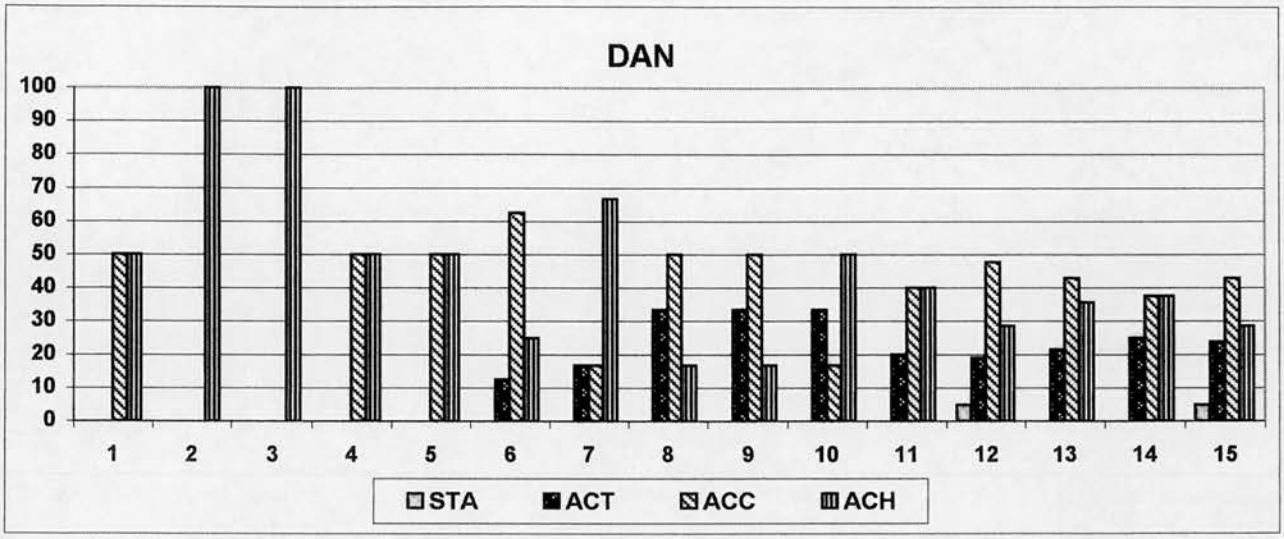
%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	0	0	0	0	0	4.35	0	0	4.76
ACT	0	0	0	0	0	25	0	0	0	10	16.7	21.7	25	23.5	19
ACC	0	0	0	66.7	50	75	60	60	60	40	33.3	39.1	75	41.2	47.6
ACH	100	100	100	33.3	50	0	40	40	40	50	50	34.8	0	35.3	28.6

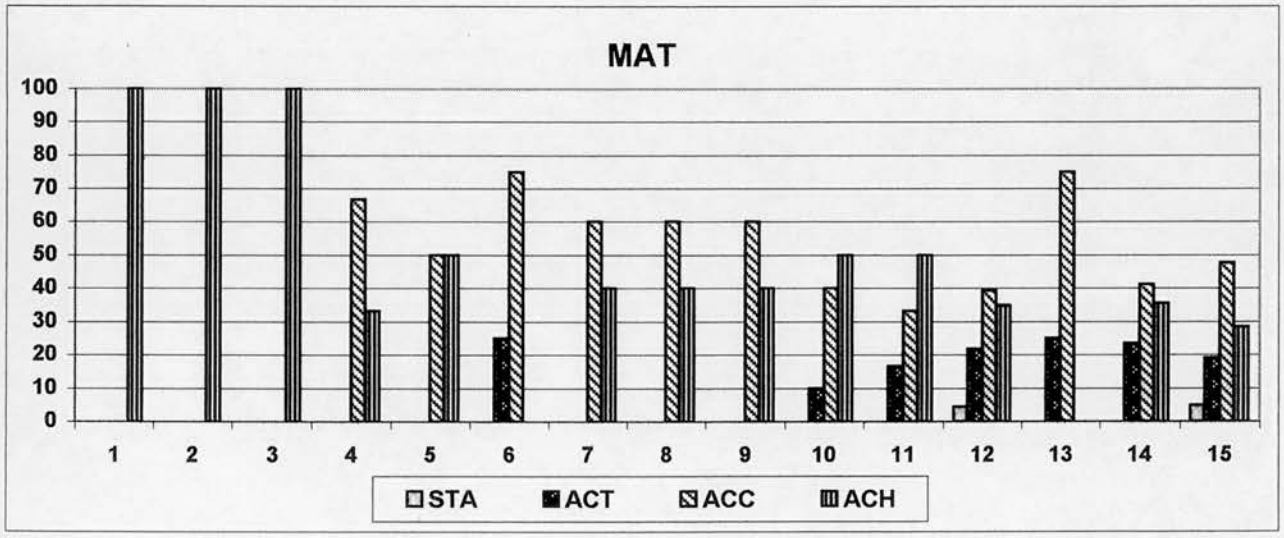
BER

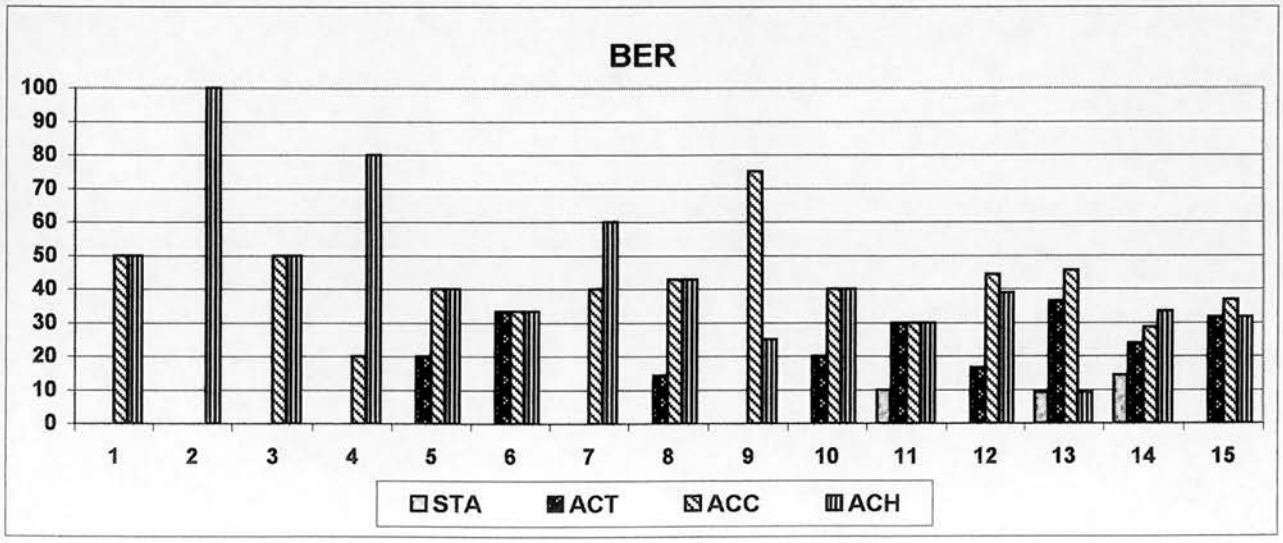
N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	0	0	0	0	1	0	1	3	0
ACT	0	0	0	0	1	1	0	1	0	1	3	3	4	5	6
ACC	1	0	1	1	2	1	2	3	3	2	3	8	5	6	7
ACH	1	2	1	4	2	1	3	3	1	2	3	7	1	7	6
TOT	2	2	2	5	5	3	5	7	4	5	10	18	11	21	19

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	0	0	0	0	10	0	9.09	14.3	0
ACT	0	0	0	0	20	33.3	0	14.3	0	20	30	16.7	36.4	23.8	31.6
ACC	50	0	50	20	40	33.3	40	42.9	75	40	30	44.4	45.5	28.6	36.8
ACH	50	100	50	80	40	33.3	60	42.9	25	40	30	38.9	9.09	33.3	31.6

Figure 4.2: SPREAD OF REGULAR PAST (%)







In the analyses presented here, the category 'regular past' subsumes both regular and regularized past since the latter represents regularity from the learner's standpoint. From S1 to S5 (S4 in BER), the *–ed* morpheme is exclusively applied to telic predicates. Throughout the study, it is generally associated with telic predicates, especially in MAT. With achievements, it marks predicates indicating an instantaneous change of location, such as *arrive* (4-17), *escape* (4-18), as well as predicates that indicate a punctual change of state/condition, such as *finish* (4-19), *die* (4-20), *explode* (4-21).

(4-17) a. DAN1-MAT1-BER1: Freddie arrived.
b. MAT2: but then she arrived in quinta@l1 [:= fifth year].
c. BER4: yesterday a new boy arrived in school.
d. DAN11: I arrived home very late.

(4-18) a. DAN2-MAT2-BER2: the beautiful tree escaped.
b. DAN12-MAT12-BER12: Bugs Bunny escaped.

(4-19) a. BER2: I finished the picture.
b. DAN3: the dinner finished at half past ten.
c. DAN12: last Friday the school finished.

(4-20) a. DAN7: the mum died
because the dog ate him.
b. MAT9: Snow White ate the apple
and died.
g. BER9: she died.

(4-21) a. DAN12-BER12: the bomb exploded.
b. INV: and the bomb?
MAT12: exploded.

With accomplishments, *–ed* is present since S1 in DAN and BER. Interestingly, the first accomplishment they both produce is the regularized past *flied* followed by a directional phrase (4-22a&b). For MAT, *-ed* spread to accomplishments in S4 and, among them,

there is also a regularized past, *digged up* (4-22c). This regularization of past forms shows the increasing mastery and productivity of this morpheme.

(4-22) a. DAN1: the bird flied [//] fly to the lion.
b. BER1: the bird flied to the lion.
c. MAT4: he digged up the bean.

Interestingly, while the standard irregular past *flew* never surfaced, 19 occurrences of the regularized past *flied* were recorded. *Flied* only appeared in a telic version, as exemplified below:

(4-23) a. DAN6: the donkey flied to the flowers
and eated the flowers.
b. BER11: the plane flied to the town.
c. MAT12: the dragonfly flied away.
d. BER12: all the ducks flied out of the pond.
e. MAT14: Bugs Bunny flied to Mars in a spaceship.
g. DAN15: I flied to Italy.

DAN and MAT also regularized the past form of the telic predicate *take*.

(4-24) a. MAT5: I taked a ladybird.
b. DAN12: he taked to prison Bugs Bunny.
c. MAT12: he taked Bugs Bunny to prison.
d. DAN13: Bugs Bunny taked two dadi@l1 [:= dice]
out of the pocket.
e. MAT15: her dad taked Skansky to Marylin's party.

Other regularized forms include achievements indicating a change of state or condition, such as *find* (4-25a&b), *throw* (4-25c), *stand up* (4-26) and *win* (4-27).

(4-25) a. MAT5: in the eggs I finded a microscope.
b. MAT12: the soldier finded a bomb.
c. DAN10-MAT10-BER10: he throwed a ball.

(4-26) a. BER12: then Piggy standed up.
b. MAT12: then he standed up.

(4-27) a. DAN6: Italy winned.
b. MAT11: but Italy winned lo+stesso@l1[:= all the same].
c. BER11: they gave the medals to the children
who winned in the fun day.
d. DAN14: I winned a white rabbit.

Regularized past forms appeared with accomplishments indicating consumption, i.e. *eat* (4-28) and *drink* (4-29), creation, i.e. *draw* (4-30a) and destruction, i.e. *break* (4-30b).

(4-28) a. MAT5: I went downstairs
and eated my chocolate eggs for breakfast.
b. MAT6: the donkey eat [//] eated the flower.

(4-29) a. DAN8-BER8: he drinked his tea.
b. DAN12: I drinked a bottle of orangina.
c. MAT13: we drinked three bottles of water.

(4-30) a. DAN9-MAT9-BER9: he drawed a picture.
b. BER14: the ship breaked in two.

The regularized past was also found with motional activities like *swim* (4-31)

(4-31) a. DAN13-MAT13: Bugs Bunny jumped in the river
and swimmed.

Accomplishments in the regular past include manner-of-movement verbs like *walk* (4-32), *jump* (4-33) followed by a directional phrase, and ditransitive verbs like *show* (4-34).

(4-32) a. DAN5-MAT5-BER5: Rosie walked to the pond.
b. DAN8-MAT8-BER8: he walked to school.

(4-33) a. MAT11: a photographer jumped over the wall.

b. DAN12-BER12: Piggy jumped into the river.

(4-34) a. DAN11-MAT11: Bugs Bunny showed a photo to the little devil.

b. BER11: Bunny showed a picture to the little devil.

c. MAT12: I showed it to mummy.

From S5-S6, the regular past starts to extend to activities. This spread is more systematic in DAN and BER. *Play* (4-35) is the most recurrent activity marked by a regular past (11/69).

(4-35) a. DAN10: I played with friend of M.

b. BER12: Bugs Bunny played the guitar.

c. MAT12: I played with it.

The regular past also occurs with punctual activities such as *jump* (4-36a), *kiss* (4-36b), *punch* (4-36c), *drop* (4-36d).

(4-36) a. DAN7: Tamburino jumped.

b. BER10: and the prince arrived
and then uh kiss [//] kissed Snow White.

c. MAT12: Bugs Bunny punched the soldier.

d. DAN14-MAT14-BER14: Bugs Bunny dropped some seeds in a manhole.

The occurrence of the regular past with states is very marginal and it includes verbs of perception such as *look* (4-37a&b) and *like* (4-37c&d).

(4-37) a. MAT12: it looked dead.

b. BER13: he looked like Adam.

c. BER14: I liked it very much.

d. DAN15: yes # I liked it a lot.

Thus, like the irregular past, the regular past occurs primarily with telic predicates.

4.1.1.3 The progressive

Thoughout the study, the progressive predominantly encodes activities such as *play* (4-38), which is the most frequent activity in the progressive (27/247).

(4-38) a. MAT1: I playing with my cousin
and I watching the video.

b. DAN2-MAT2-BER2: the tree playing the harp.

c. BER5: we playing with my two brothers and my friends
at football.

d. DAN12: we playing bingo.

Also, the progressive is generally found with manner-of-movement verbs like *walk* (4-39), *fly* (4-40), *run* (4-41), *jump* (4-42), *swim* (4-43).

(4-39) a. BER1: Nicola walking
and the shark eat his head.

b. DAN7-MAT7-BER7: Bambi walking in the snow.

c. MAT7: then I walking for a long time.

(4-40) a. DAN3-MAT3: the leaves flying.

b. MAT11-BER11: the plane flying.

c. BER15: I got in a helicopter
and flying around the mountain.

(4-41) a. DAN1-MAT1-BER1: the zebra running.

b. BER13: all the animals running.

(4-42) a. DAN5: the puppet jumping.

b. BER12: Piggy jumping.

(4-43) a. MAT3: I swimming in the swimming pool.

b. BER13: Bugs Bunny jumped in the river
and swimming.

The progressive encodes bodily activities such as *laugh* (4-44), *cry* (4-45), *sleep* (4-46).

(4-44) a. BER5: we laughing because he make joke.

b. DAN7: Tamburino skating
and laughing.

c. MAT10: they laughing.

d. DAN11-MAT11-BER11: the ducks laughing at Piggy.

(4-45) a. MAT8: I crying
because I wanting the my mummy.

b. INV: what did the soldier do?
DAN12: crashed into the tree
and crying.

c. BER12: the soldier crashed into the tree
and he crying.

(4-46) a. INV: and then?
DAN8: and playing
and I sleeping at nine o'clock.

b. MAT8: after two hours we sleeping.

c. BER8: when he sleeping
the puppies of the sheepdog came to the pig.

Other activities include weather verbs such as *rain* (4-47a), *snow* (4-47b), and the weather-related verb *shine* (4-47c), which indicates light emission.

(4-47) a. DAN3: it raining.

b. DAN4-BER4: it snowing.

c. DAN11-MAT11-BER11: the sun # uh shining.

Table 4.5: SPREAD OF PROGRESSIVE

DAN

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	3	1	1	1	3	1	2	3	2
ACT	5	5	7	8	7	4	8	6	9	5	8	4	3	3	3
ACC	0	2	0	0	2	0	3	1	0	0	0	0	0	1	0
ACH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT	5	7	7	8	9	4	14	8	10	6	11	5	5	7	5

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	21.4	12.5	10	16.7	27.3	20	40	42.9	40
ACT	100	71.4	100	100	77.8	100	57.1	75	90	83.3	72.7	80	60	42.9	60
ACC	0	28.6	0	0	22.2	0	21.4	12.5	0	0	0	0	0	14.3	0
ACH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

MAT

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	1	1	0	1	3	2	3	3	1
ACT	4	4	7	4	10	4	10	10	7	6	4	4	4	3	3
ACC	1	1	1	0	2	1	1	0	1	0	0	0	0	0	0
ACH	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
TOT	5	5	8	4	13	5	12	11	8	7	7	6	7	6	4

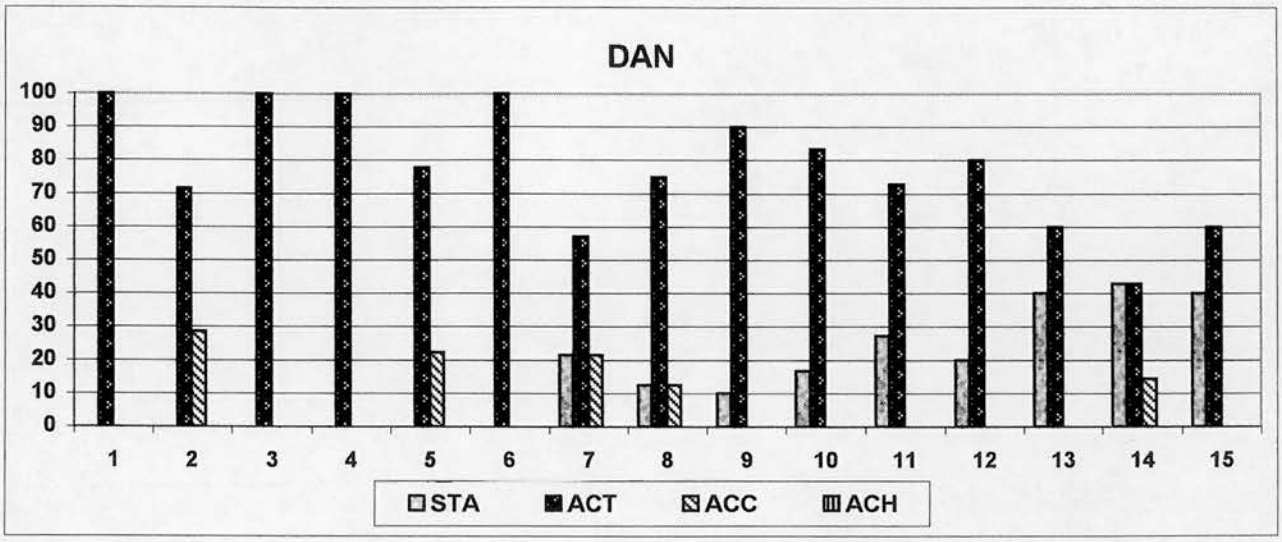
%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	8.33	9.09	0	14.3	42.9	33.3	42.9	50	25
ACT	80	80	87.5	100	76.9	80	83.3	90.9	87.5	85.7	57.1	66.7	57.1	50	75
ACC	20	20	12.5	0	15.4	20	8.33	0	12.5	0	0	0	0	0	0
ACH	0	0	0	0	7.69	0	0	0	0	0	0	0	0	0	0

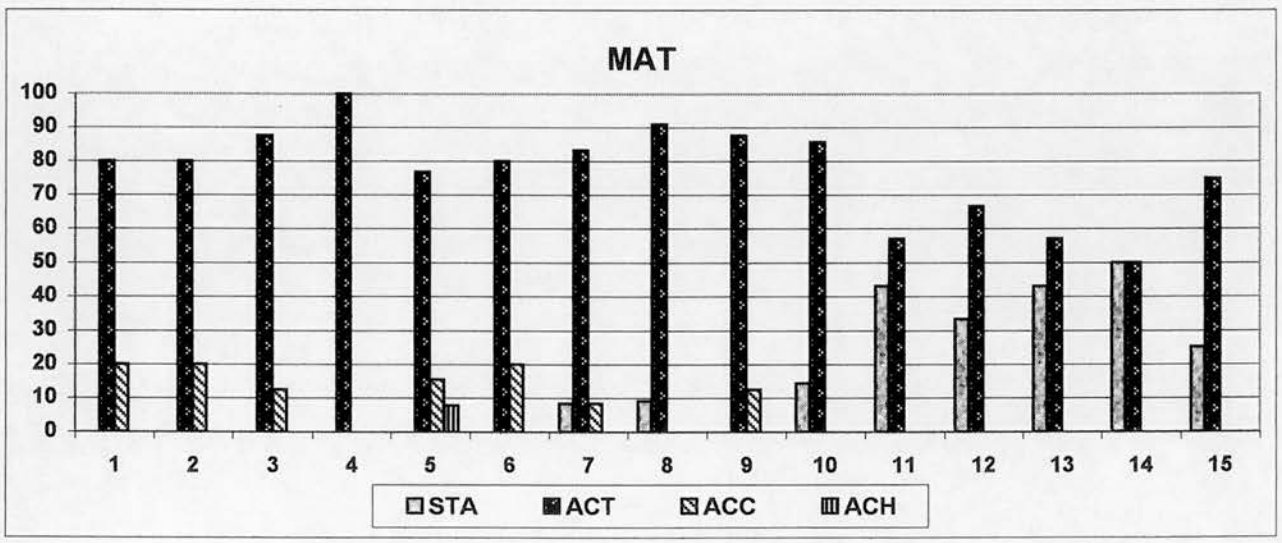
BER

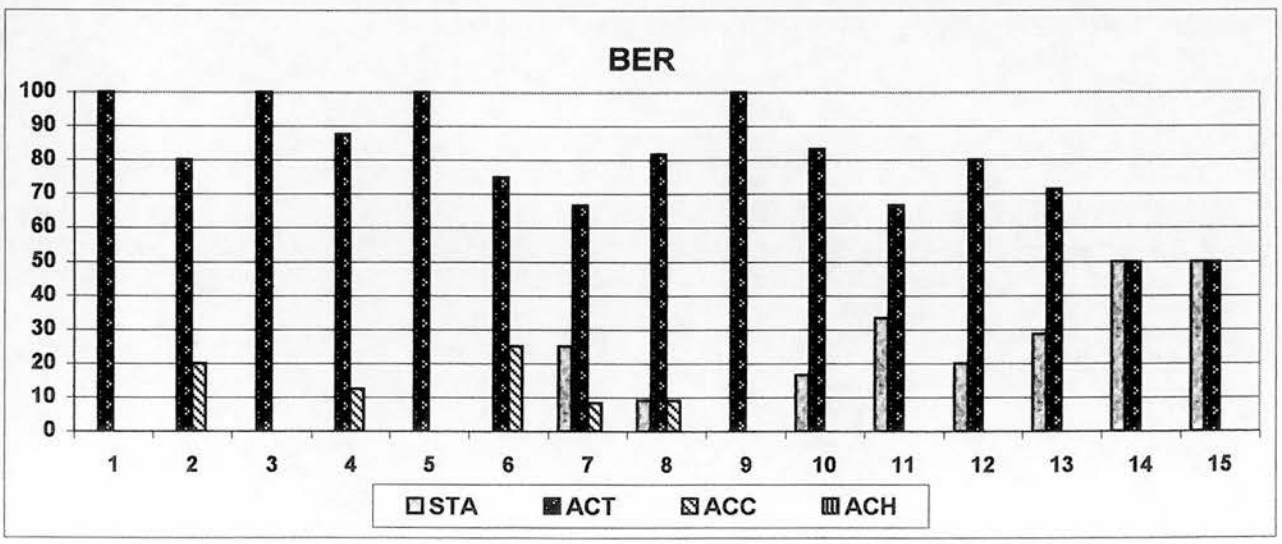
N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	3	1	0	1	3	1	2	2	2
ACT	5	4	5	7	7	3	8	9	6	5	6	4	5	2	2
ACC	0	1	0	1	0	1	1	1	0	0	0	0	0	0	0
ACH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT	5	5	5	8	7	4	12	11	6	6	9	5	7	4	4

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	25	9.09	0	16.7	33.3	20	28.6	50	50
ACT	100	80	100	87.5	100	75	66.7	81.8	100	83.3	66.7	80	71.4	50	50
ACC	0	20	0	12.5	0	25	8.33	9.09	0	0	0	0	0	0	0
ACH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Figure 4.3: SPREAD OF PROGRESSIVE (%)







The progressive also marks accomplishments, although to a much lesser extent and not in every session. These include processes with a defined object or endpoint, like *watch* in (4-48a), *eat* in (4-48b), *fly* in (4-48c). From S8-S9, the progressive virtually disappears with accomplishments

(4-48) a. MAT1: I watching the video.
b. DAN5: Paul eating the cake.
c. BER6: the donkey flying to the flower.

From S7, the progressive is extended to states. *Want* is the state that most frequently received progressive marking (20/47).

(4-49) a. DAN7-MAT7: Foxie wanting to catch her.
b. DAN8: because my daddy wanting a book of Oxford.
c. MAT8: I crying
because I wanting the my mummy.
d. DAN11-BER11: Bunny wanting to catch the little devil.
e. DAN12: the soldier wanting to arrest Bugs Bunny.
f. MAT13-BER13: the boy wanting to shoot Bugs Bunny.

Other stative progressives include *knowing* (4-50a), *belonging* (4-50b), *seeming* (4-50c) and *needing* (4-50d). There are also states that could exhibit a stage-level property such as *living* (4-51a), *looking* (4-51b&c), *feeling* (4-51d).

(4-50) a. BER13: because Neil knowing Piggy.
b. INV: Titanic [beep] to a company called Cunard Lines.
DAN14-MAT14: belonging.
c. INV: it was the ship of dreams
everybody [beep] happy
DAN14-MAT14: seeming.
d. BER14: I came back to the shop
because I needing a kickstand.

(4-51) a. MAT11-BER11: Piggy living in the countryside.

b. MAT7: Tamburino looking very happy.

c. MAT13: at the end he looking like Adam.

d. DAN11-BER11: Piggy feeling very hot.

To sum up, the progressive is strongly restricted to activities. However, from S7, it is also found with states. Furthermore, as evident from the examples above, the progressive remained bare throughout the study.

4.1.2 Within-category analysis

This approach focuses on the morphological development within each of the four lexical aspectual classes. In addition to the three verb forms analyzed in 4.1.1, the base form is also included (see table 4.1 for the number of base form tokens). The table below displays the number of tokens employed in this analysis.

Table 4.6: Number of L2 English tokens in the within-category analysis

	DAN	MAT	BER	TOTAL
STA	46	48	53	147
ACT	132	132	142	406
ACC	152	141	173	466
ACH	83	81	95	259
TOTAL	413	402	463	1278

Next, I will describe how each lexical aspectual class is marked developmentally.

4.1.2.1 States

Up to S6, all states appear in the base form. These include verbs of desire, i.e. *want* (4-52) and perception, i.e. *see* (4-53), *like* (4-54), *look* (4-55), *seem* (4-56), *feel* (4-57).

Table 4.7: MARKING OF STATES

DAN

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	5	7	2	1	2	3	1	0	1	1	0	1	1	0	0
Prog	0	0	0	0	0	0	3	1	1	1	3	1	2	3	2
IrrP	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
RegP	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
TOT	5	7	2	1	2	3	4	2	2	2	4	3	3	3	3

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	100	100	100	100	100	100	25	0	50	50	0	33.3	33.3	0	0
Prog	0	0	0	0	0	0	75	50	50	50	75	33.3	66.7	100	66.7
IrrP	0	0	0	0	0	0	0	50	0	0	25	0	0	0	0
RegP	0	0	0	0	0	0	0	0	0	0	0	33.3	0	0	33.3

MAT

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	5	6	5	2	2	2	2	1	1	0	2	0	0	1	0
Prog	0	0	0	0	0	0	1	1	0	1	3	2	3	3	1
IrrP	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
RegP	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
TOT	5	6	5	2	2	2	3	2	1	2	5	3	3	5	2

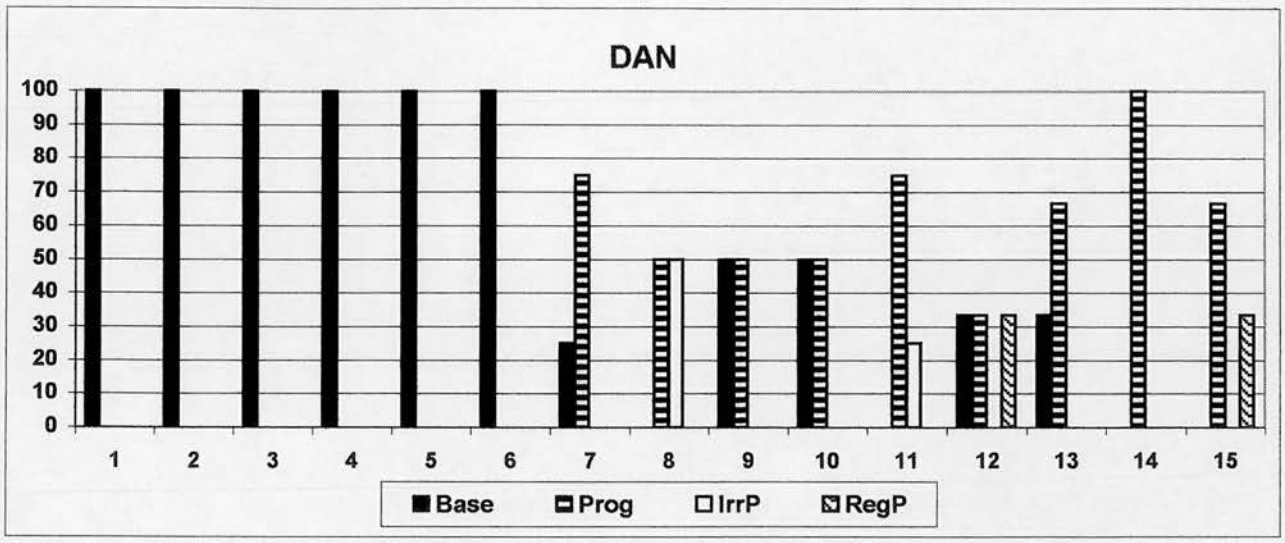
%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	100	100	100	100	100	100	66.7	50	100	0	40	0	0	20	0
Prog	0	0	0	0	0	0	33.3	50	0	50	60	66.7	100	60	50
IrrP	0	0	0	0	0	0	0	0	0	50	0	0	0	20	0
RegP	0	0	0	0	0	0	0	0	0	0	0	33.3	0	0	50

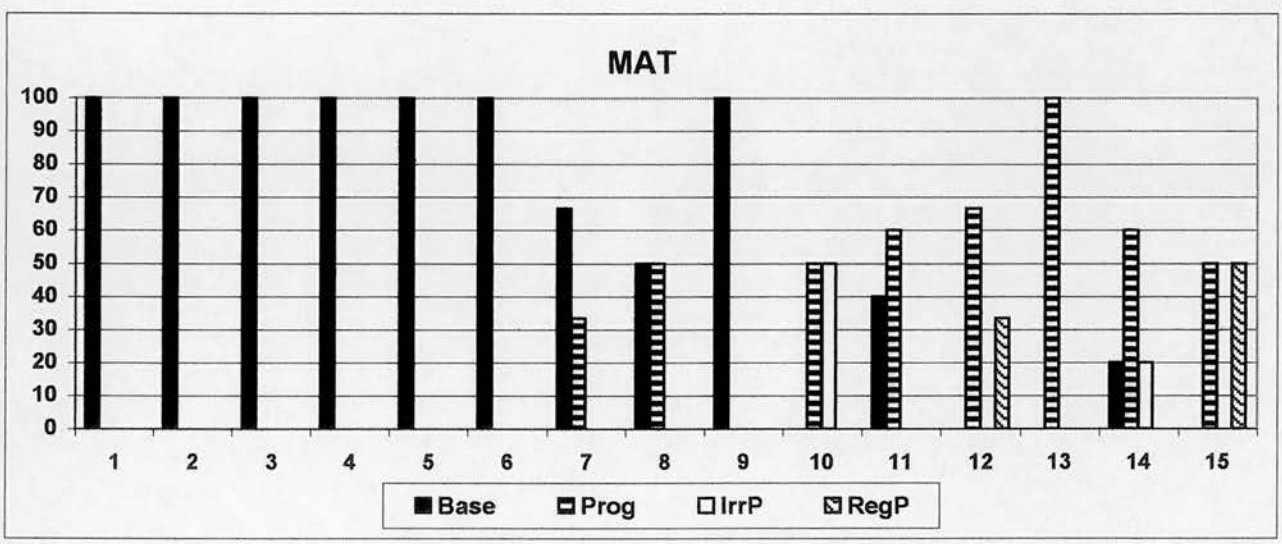
BER

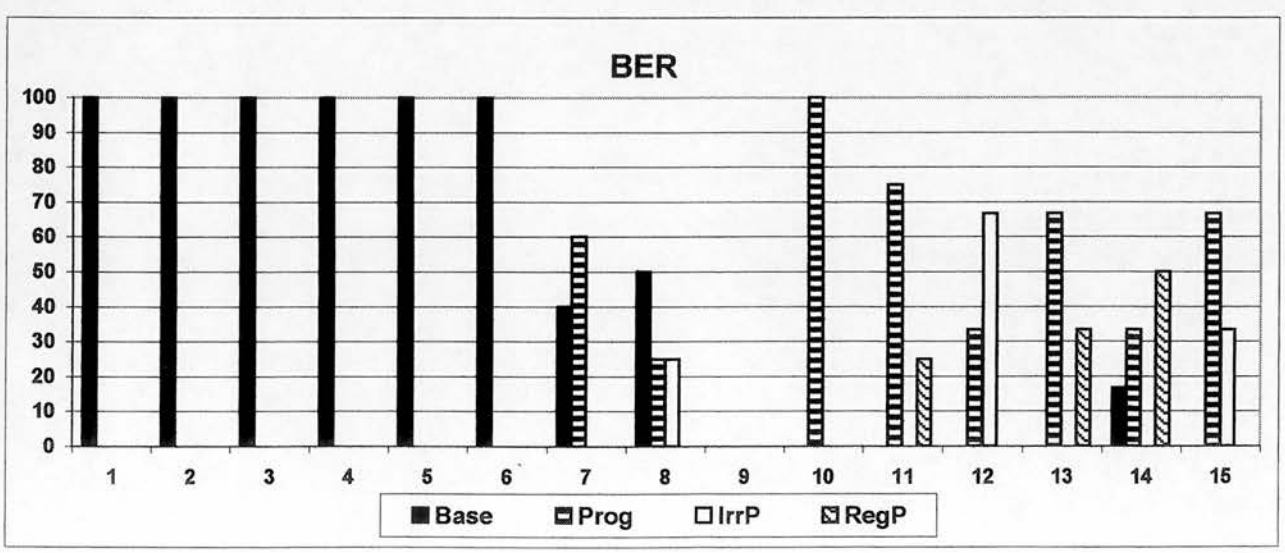
N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	7	9	3	2	2	1	2	2	0	0	0	0	0	1	0
Prog	0	0	0	0	0	0	3	1	0	1	3	1	2	2	2
IrrP	0	0	0	0	0	0	0	1	0	0	0	2	0	0	1
RegP	0	0	0	0	0	0	0	0	0	0	1	0	1	3	0
TOT	7	9	3	2	2	1	5	4	0	1	4	3	3	6	3

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	100	100	100	100	100	100	40	50	####	0	0	0	0	16.7	0
Prog	0	0	0	0	0	0	60	25	####	100	75	33.3	66.7	33.3	66.7
IrrP	0	0	0	0	0	0	0	25	####	0	0	66.7	0	0	33.3
RegP	0	0	0	0	0	0	0	0	####	0	25	0	33.3	50	0

Figure 4.4: MARKING OF STATES (%)







(4-52) a. DAN2-MAT2-BER2: the ugly tree want the beautiful tree.

b. MAT3: the pirates want to attack the tourists.

c. BER5: the doll fell
and he want his mummy.

d. DAN6: he want to eat the hat of the boy.

(4-53) a. MAT1: I see my cousins and my auntie.

b. DAN1: I see a frog.

c. BER1: I see a lot of picture
uh look real.

(4-54) a. INV: did you enjoy Stonehenge?
DAN2: yes # I like it a lot.

b. BER2: he like her a lot.

c. MAT3: Jasper like his bean.

(4-55) a. DAN2-MAT2-BER2: his mum look surprised.

b. DAN4-MAT4-BER4: he look very annoyed.

c. DAN6-MAT6: he look very happy.

(4-56) a. DAN1-MAT1-BER1: the big lion seem happy.

b. DAN5-MAT5-BER5: the cat seem happy.

(4-57) a. DAN2-MAT2-BER2: Wolfy feel excited.

b. DAN3-MAT3-BER3: Bambi feel cold.

From S7, states are increasingly marked by the progressive. Stative progressives highlight the background of narration, providing support information and additional context to the main line of the story. Examples are supplied below and also in 4.1.1.3 above.

(4-58) a. MAT11: Bugs Bunny wanting to catch the little devil
but the little devil ran away.

b. INV: why did he jump over the wall?

MAT11: because he wanting to take photos of the players very near
uh but the police stopped him.

c. INV: once upon a time there was a pig named Piggy Piggy [beep] in the countryside.
DAN11: living.
MAT11-BER11: Piggy living in the countryside.

d. BER12: the soldier wanting to arrest Bugs Bunny but Bugs Bunny escaped.

e. INV: the three billy goats Gruff were very frightened of the troll
but they still [beep] the sweet green grass.
DAN15-MAT15: wanting.
BER15: wanting the sweet green grass.

With stative progressives the situation is viewed imperfectively, i.e. as durative and open, without defined boundaries. There is natural link between stativity and imperfectivity: they are conflated in the continuous aspect, which, as argued in Ch.1, represents a central component of the imperfective aspect. However, an imperfective marker such as the progressive form occurs with states only under certain particular conditions illustrated in 1.3.2. The striking features of these L2 English data is the relatively high proportion of stative progressives, especially with states such as *want*, where, in native English, the use of the progressive represents a marked choice.

The only states that never appear in the progressive are *see* and *like*, which can be found either in the base form, as in (4-53) and (4-54), or in the past form, as shown in 4.1.1.1 and 4.1.1.2. These predicates present the situation perfectively in that the experience of seeing or liking something is perceived as a whole, complete and punctual. Furthermore, as argued in 1.2.4, states like *see* can also be interpreted as achievements when the event referred to describes an instantaneous change of state, as in (4-59), where the visual perception of the object occurs suddenly as a consequence of a previous event.

(4-59) a. he climbed a mountain
and he see a nest.

To sum up, from S1 to S6, states appear only in the base form. From S7, they are marked by the progressive. States in the progressive expresses imperfective aspect whereas states in the past express perfective aspect. More specifically, those states that indicate a punctual experience occurred either in the base form or in past form. The past is intermittently extended to states from S8 in DAN and BER and from S10 in MAT.

4.1.2.2 Activities

Up to S10-S11, the marking of activities is generally confined to the progressive, which encodes dynamic-atelic predicates such as those exemplified in 4.1.1.3. Activities also appear in the base form, especially up to S6. After S6, activities in the base form decrease dramatically and appear intermittently. The base form is found with more 'stative' activities, such as *wait* (4-60a), *sleep* (4-60b), *stand* (4-60c), *stay* (4-61). In fact, as discussed in 1.3.2, a postural predicate like *stand* is on the borderline with states.

(4-60) a. DAN4-MAT4-BER4: Jasper wait.
b. DAN3: he came back home
and sleep.
c. MAT3-BER3: Jasper stand with the bean in his hand.

(4-61) a. BER2: I stay on the boat only one hours.
b. DAN5: I stay in hotel for two days.
c. MAT9: I stay at home
because my grandma was not well.

Other activities in the base form are those that could yield a punctual interpretation, such as *bite* (4-62a), *laugh* (4-62b&c), *smile* (4-62d), *pull* (4-62e), where the predicate seems to indicate a single instance of the action it refers to.

(4-62) a. MAT1: and my cousin bite the leg of his friend.
INV: uh!
b. MAT1: and I laugh.

c. BER5: he opened the door
and he laugh.

d. DAN1-MAT1-BER1: Wolfy smile.

e. DAN6-MAT6: Rosie pull a string.

From S4 in BER and from S6 in DAN and MAT, activities start to be encoded in the past. As pointed out in 4.1.1.2, *play* is the activity that recurs most frequently in the past. However, as shown in 4.1.1.3, *play* is also the activity that recurs most frequently in the progressive. Thus *play* is first marked by *–ing* and later by *–ed*. The occurrence of past morphology with activities signals that the children's narratives are beginning to be more systematically anchored in the past.

(4-63) a. INV: what did you do in the fun day?
BER11: we played football
uh we ran
we played games
we did high and long jump.

b. DAN13: L. invited three girls and ten boys
I played with L.
and ate fish and chips.

c. MAT12: today I found a dragonfly in the garden
uh uh she moving her tail a little bit
I played with it.

The progressive in (4-63c) encodes imperfective aspect in that the action referred to is in progress with respect to the foreground of the story. In other words, the dragonfly was moving its tail before and after the child found it. Thus, the progressive supplies background information to the main events of the story, which are sequentially ordered. That is, the action of playing with the dragonfly is subsequent to its finding, but the movement of its tail overlaps with the other two events, presenting a sideline comment to the story. Hence, the difference between the progressive form and the past form is aspectual. Similarly, in (4-64a) *playing* is an imperfective marker of habituality, whereas in (4-64b) *played* is a perfective marker that foregrounds the action described. As evident from (4-64a&b), both forms of *play* were produced by the same child in the same session.

Table 4.8: MARKING OF ACTIVITIES

DAN

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	2	1	2	2	3	1	0	0	1	1	1	0	0	0	0
Prog	5	5	7	8	7	4	8	6	9	5	8	4	3	3	3
IrrP	0	0	0	0	0	0	0	0	1	2	0	2	2	0	1
RegP	0	0	0	0	0	1	1	2	2	2	1	4	3	4	5
TOT	7	6	9	10	10	6	9	8	13	10	10	10	8	7	9

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	28.6	16.7	22.2	20	30	16.7	0	0	7.69	10	10	0	0	0	0
Prog	71.4	83.3	77.8	80	70	66.7	88.9	75	69.2	50	80	40	37.5	42.9	33.3
IrrP	0	0	0	0	0	0	0	0	7.69	20	0	20	25	0	11.1
RegP	0	0	0	0	0	16.7	11.1	25	15.4	20	10	40	37.5	57.1	55.6

MAT

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	5	2	5	3	3	3	0	0	1	1	0	0	1	0	0
Prog	4	4	7	4	10	4	10	10	7	6	4	4	4	3	3
IrrP	0	0	0	0	0	1	0	0	1	1	0	0	1	0	1
RegP	0	0	0	0	0	1	0	0	0	1	2	5	2	4	4
TOT	9	6	12	7	13	9	10	10	9	9	6	9	8	7	8

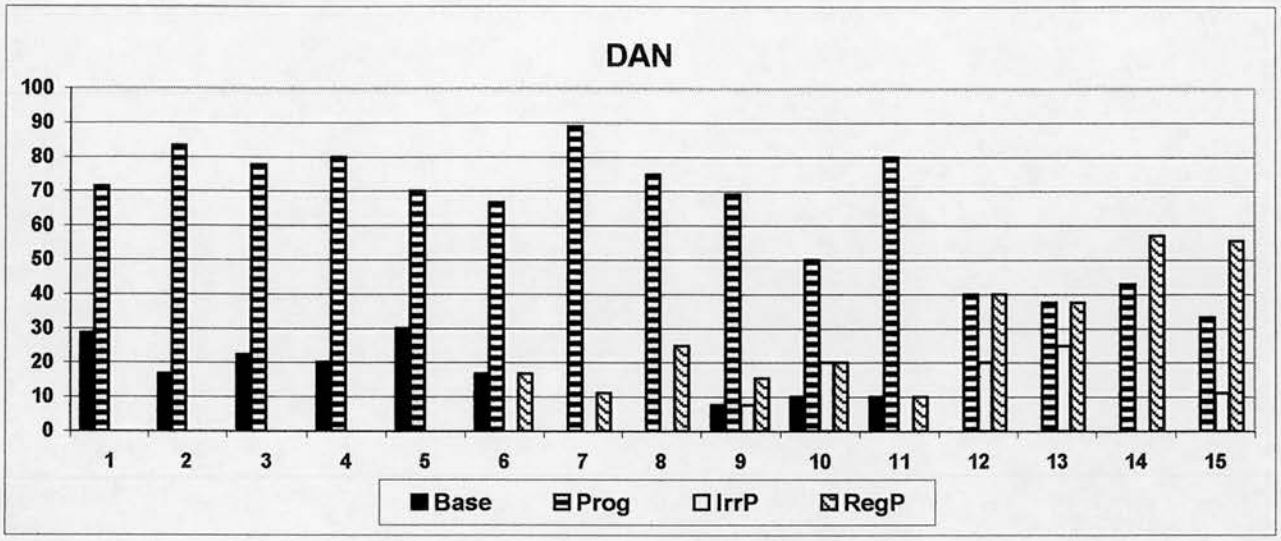
%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	55.6	33.3	41.7	42.9	23.1	33.3	0	0	11.1	11.1	0	0	12.5	0	0
Prog	44.4	66.7	58.3	57.1	76.9	44.4	100	100	77.8	66.7	66.7	44.4	50	42.9	37.5
IrrP	0	0	0	0	0	11.1	0	0	11.1	11.1	0	0	12.5	0	12.5
RegP	0	0	0	0	0	11.1	0	0	0	11.1	33.3	55.6	25	57.1	50

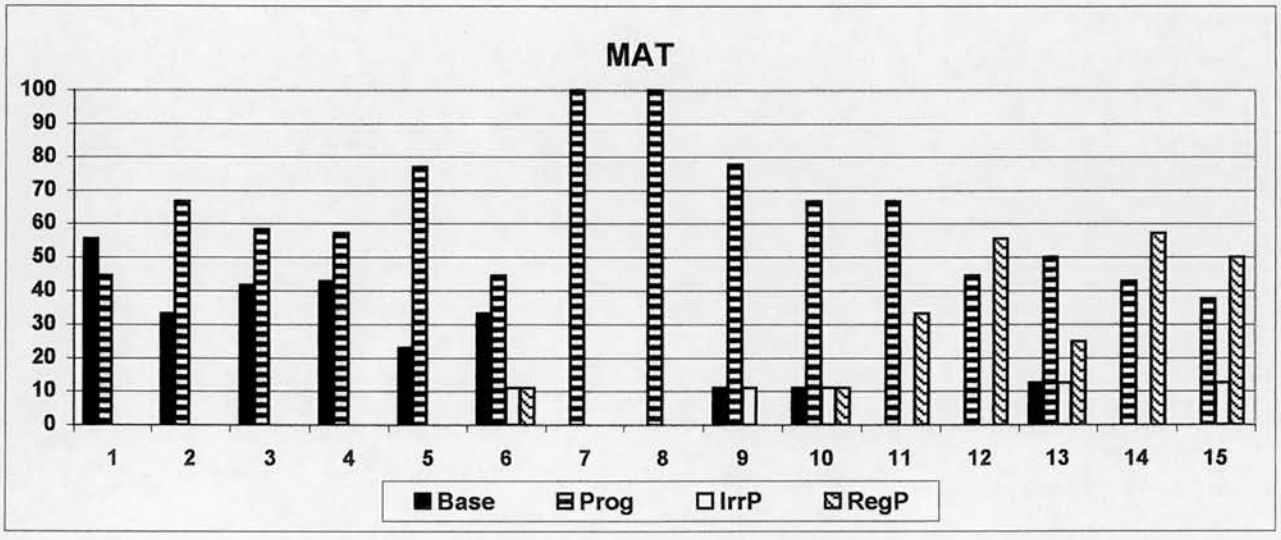
BER

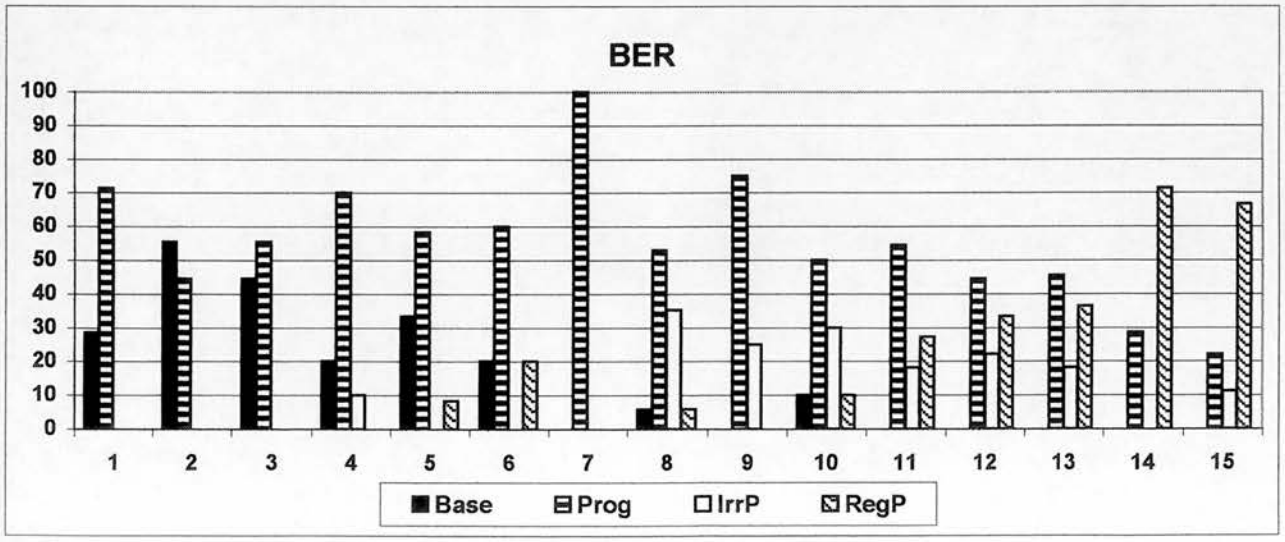
N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	2	5	4	2	4	1	0	1	0	1	0	0	0	0	0
Prog	5	4	5	7	7	3	8	9	6	5	6	4	5	2	2
IrrP	0	0	0	1	0	0	0	6	2	3	2	2	2	0	1
RegP	0	0	0	0	1	1	0	1	0	1	3	3	4	5	6
TOT	7	9	9	10	12	5	8	17	8	10	11	9	11	7	9

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	28.6	55.6	44.4	20	33.3	20	0	5.88	0	10	0	0	0	0	0
Prog	71.4	44.4	55.6	70	58.3	60	100	52.9	75	50	54.5	44.4	45.5	28.6	22.2
IrrP	0	0	0	10	0	0	0	35.3	25	30	18.2	22.2	18.2	0	11.1
RegP	0	0	0	0	8.33	20	0	5.88	0	10	27.3	33.3	36.4	71.4	66.7

Figure 4.5: MARKING OF ACTIVITIES (%)







(4-64) a. BER13: every evening we playing football in the garden.

b. BER13: then Bugs Bunny took two dice out of the pocket.
INV: and +..?
BER13: Bugs Bunny played with the boy.
INV: what did they play?
BER13: they played dice.

Punctual activities such as *say* (4-65), *jump* (4-66), *kiss* (4-67), *drop* (4-68), *punch* (4-69), are also found in the past.

(4-65) a. BER8: one puppy said +" who are you? +"
and the pig said +" I don't know +".

b. DAN10-MAT10-BER10: Snow White said goodbye
and went away with the prince.

c. DAN12: the teacher gived us the homework
and said good holiday.

(4-66) a. DAN7: Tamburino jumped.

b. DAN8: the people jumped.

c. MAT12: and he jumped.

(4-67) a. MAT10: the prince kissed Snow White.

b. BER12: he kissed the soldier.

(4-68) a. DAN14-MAT14-BER14: Bugs Bunny dropped some seeds in a manhole.

(4-69) a. MAT12: Bugs Bunny punched the soldier.

b. INV: what did Bugs Bunny do?
DAN12: ripped off the uniform of the soldier
uh punched the soldier.

Other activities encoded in the past are those that can shift into accomplishments through the addition of a bounding complement (see 1.2.3.4 and 1.2.4). These activities include

motional predicates, i.e. *run* (4-70a), *walk* (4-70b&c), as well as predicates indicating consumption, i.e. *eat* (4-71), and creation, i.e. *write* (4-72a), *draw* (4-72b&c).

(4-70) a. DAN13-MAT13-BER13: the boy ran after Bugs Bunny.
b. MAT6: Rosie walked over the haycock.
c. BER8: he walked in the park.

(4-71) a. DAN9: I came home
and ate pasta.
b. BER12: when they left
I ate chicken nuggets and chips.

(4-72) a. BER10: I wrote in my diary.
b. DAN15: Marylin drawed cartoons.
c. BER15: she drawed a lot of cartoons.

In sum, activities are strongly linked to the progressive. However, from S10-S11, this link starts to weaken and past marking on activities starts to increase. Activities are also found in the base form, particularly up to S6. Stative activities appear in the base form. Punctual activities first appear in the base form and later in the past, whereas activities that can turn into accomplishments first appear in the progressive and later in the past. Furthermore, the past morphology with activities shows an incipient ability to scaffold narratives in the past.

4.1.2.3 Accomplishments

Initially, accomplishments appear mainly in the base form.

(4-73) a. DAN1: yesterday I go to J.
b. DAN1: I come home.
INV: and what did you do at home?
DAN1: I make a barbecue.

c. MAT1: last week I go to Edinburgh.

d. INV: what did you do last week for the half term?
BER1: for the half term I go to Edinburgh.

e. DAN1-MAT1-BER1: Wolfy go inside a box.

(4-74) a. INV: what did you do in the European hour?
BER2: I paint a picture.

b. BER2: I do a sea and the Big Ben.

c. DAN2-BER2: the bird learn a song.

d. MAT2: Wolfy walk home.

e. DAN2-MAT2-BER2: Wolfy come out of the box.

(4-75) a. MAT3: last week I go to Disneyland in Paris.

b. MAT3: I walk to the park.

c. DAN3-BER3: Jasper show his bean to us.

d. MAT3: he plant the bean.

(4-76) a. MAT4: last week I go to Burton on the Water.

b. DAN4-MAT4-BER4: the water freeze.

c. MAT4-BER4: but then a beanstalk grow.

The predominance of the base form for accomplishments occurs only initially in DAN whereas in MAT and BER it is constant until S4-S5. The decrease of accomplishments in the base form is parallel to their increase in the past form, especially in the irregular past. In fact, the most frequent accomplishment (67/466) is *went* followed by a directional phrase. *Went* surfaces very early in the study and, interestingly, regularized forms like *goed* or *wented* were never found. Other recurrent accomplishments include consumption/creation predicates followed by a defined object, i.e. *ate, did, made*, and also motional predicates followed by a directional complement, i.e. *came, ran, walked, jumped, flied.* Accomplishments in the irregular past are exemplified in 4.1.1.1 and those in the regular past are exemplified in 4.1.1.2. As to accomplishments in the progressive, they are generally marginal and they virtually disappears after S8-S9. Examples of accomplishments in the progressive are supplied in 4.1.1.3.

Table 4.9: MARKING OF ACCOMPLISHMENTS

DAN

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	8	6	3	5	3	1	0	0	0	0	0	0	0	1	0
Prog	0	2	0	0	2	0	3	1	0	0	0	0	0	1	0
IrrP	0	1	3	8	3	5	4	5	5	7	8	4	3	5	5
RegP	1	0	0	2	1	5	1	3	3	1	2	10	6	6	9
TOT	9	9	6	15	9	11	8	9	8	8	10	14	9	13	14

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	88.9	66.7	50	33.3	33.3	9.09	0	0	0	0	0	0	0	7.69	0
Prog	0	22.2	0	0	22.2	0	37.5	11.1	0	0	0	0	0	7.69	0
IrrP	0	11.1	50	53.3	33.3	45.5	50	55.6	62.5	87.5	80	28.6	33.3	38.5	35.7
RegP	11.1	0	0	13.3	11.1	45.5	12.5	33.3	37.5	12.5	20	71.4	66.7	46.2	64.3

MAT

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	6	4	4	8	1	2	0	0	0	0	0	0	0	0	0
Prog	1	1	1	0	2	1	1	0	1	0	0	0	0	0	0
IrrP	0	1	0	1	2	4	8	5	9	4	2	3	7	2	1
RegP	0	0	0	4	3	3	3	3	3	4	4	9	6	7	10
TOT	7	6	5	13	8	10	12	8	13	8	6	12	13	9	11

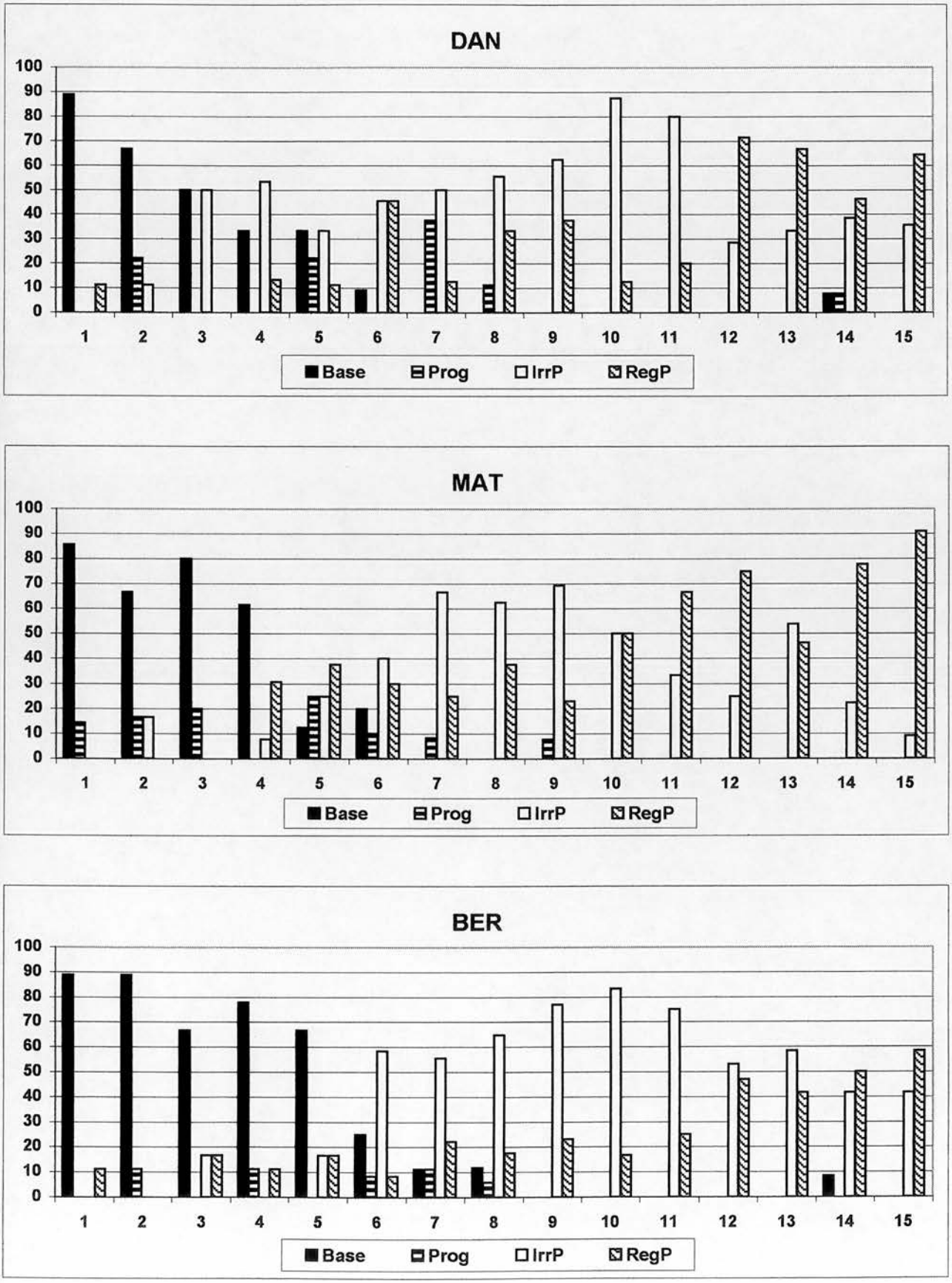
%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	85.7	66.7	80	61.5	12.5	20	0	0	0	0	0	0	0	0	0
Prog	14.3	16.7	20	0	25	10	8.33	0	7.69	0	0	0	0	0	0
IrrP	0	16.7	0	7.69	25	40	66.7	62.5	69.2	50	33.3	25	53.8	22.2	9.09
RegP	0	0	0	30.8	37.5	30	25	37.5	23.1	50	66.7	75	46.2	77.8	90.9

BER

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	8	8	4	7	8	3	1	2	0	0	0	0	0	1	0
Prog	0	1	0	1	0	1	1	1	0	0	0	0	0	0	0
IrrP	0	0	1	0	2	7	5	11	10	10	9	9	7	5	5
RegP	1	0	1	1	2	1	2	3	3	2	3	8	5	6	7
TOT	9	9	6	9	12	12	9	17	13	12	12	17	12	12	12

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	88.9	88.9	66.7	77.8	66.7	25	11.1	11.8	0	0	0	0	0	8.33	0
Prog	0	11.1	0	11.1	0	8.33	11.1	5.88	0	0	0	0	0	0	0
IrrP	0	0	16.7	0	16.7	58.3	55.6	64.7	76.9	83.3	75	52.9	58.3	41.7	41.7
RegP	11.1	0	16.7	11.1	16.7	8.33	22.2	17.6	23.1	16.7	25	47.1	41.7	50	58.3

Figure 4.6: MARKING OF ACCOMPLISHMENTS (%)



4.1.2.4 *Achievements*

Like the other lexical aspectual classes, achievements initially surface in the base form.

(4-77) a. DAN1-MAT1-BER1: the sun rise.
b. DAN2-BER2: the truck leave.
c. MAT2: the ugly tree fall.

(4-78) a. DAN3-MAT3: the autumn start.
b. BER3: last week I went to Italy
because my grandpa die.
c. DAN3: last week Jasper find a bean.

(4-79) a. BER4: this morning he hide [/] he hide behind the door.
b. MAT4: I buy a teddy bear.

(4-80) a. DAN5: yesterday # John steal the cake.
b. BER5: we win for three [= three times].

The base form gradually decreases until it virtually disappears after S5-S6, when achievements are encoded solely by past forms, except for the one achievement in the base form produced by BER in S8. Achievements in both regular and irregular past are present since the first sessions. Achievements generally express an instantaneous change, that may affect the location of an entity (*arrive, escape, fall, leave, stand up, throw*) or its state/condition (*wake up, die, finish, find, win, loose, explode*). Examples of achievements in the irregular and regular past are provided in 4.1.1.1 and in 4.1.1.2 respectively. Achievements in the regular past outnumber achievements in the irregular past, especially in DAN and MAT. Furthermore, as exemplified in 4.1.1.2, achievements were also encoded by regularized past forms: *finded, throwed, standed up, winned*. Finally, it should be noted that only one achievement was marked by the progressive.

(4-81) a. MAT5: John like the pie
and stealing the pie.

Table 4.10: MARKING OF ACHIEVEMENTS

DAN

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	3	2	2	1	1	1	0	0	0	0	0	0	0	0	0
Prog	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IrrP	0	1	0	1	4	2	4	4	1	2	2	3	2	1	2
RegP	1	1	3	2	1	2	4	1	1	3	2	6	5	6	6
TOT	4	4	5	4	6	5	8	5	2	5	4	9	7	7	8

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	75	50	40	25	16.7	20	0	0	0	0	0	0	0	0	0
Prog	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IrrP	0	25	0	25	66.7	40	50	80	50	40	50	33.3	28.6	14.3	25
RegP	25	25	60	50	16.7	40	50	20	50	60	50	66.7	71.4	85.7	75

MAT

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	2	3	1	2	1	1	0	0	0	0	0	0	0	0	0
Prog	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
IrrP	0	1	2	0	2	4	2	2	0	1	1	1	4	2	2
RegP	1	2	1	2	3	0	2	2	2	5	6	8	0	6	6
TOT	3	6	4	4	7	5	4	4	2	6	7	9	4	8	8

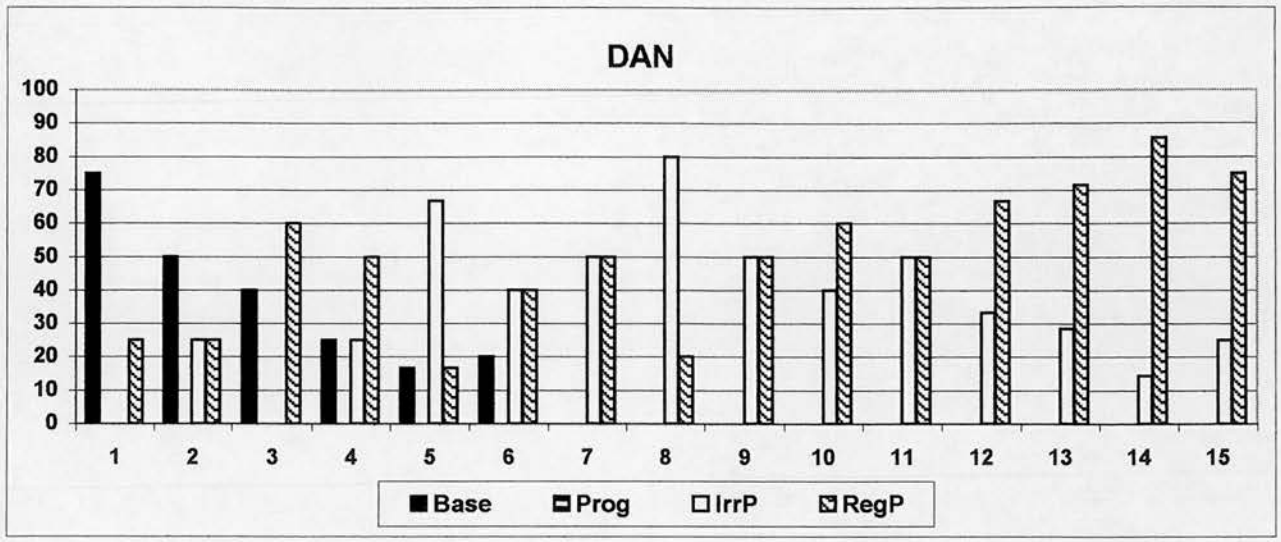
%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	66.7	50	25	50	14.3	20	0	0	0	0	0	0	0	0	0
Prog	0	0	0	0	14.3	0	0	0	0	0	0	0	0	0	0
IrrP	0	16.7	50	0	28.6	80	50	50	0	16.7	14.3	11.1	100	25	25
RegP	33.3	33.3	25	50	42.9	0	50	50	100	83.3	85.7	88.9	0	75	75

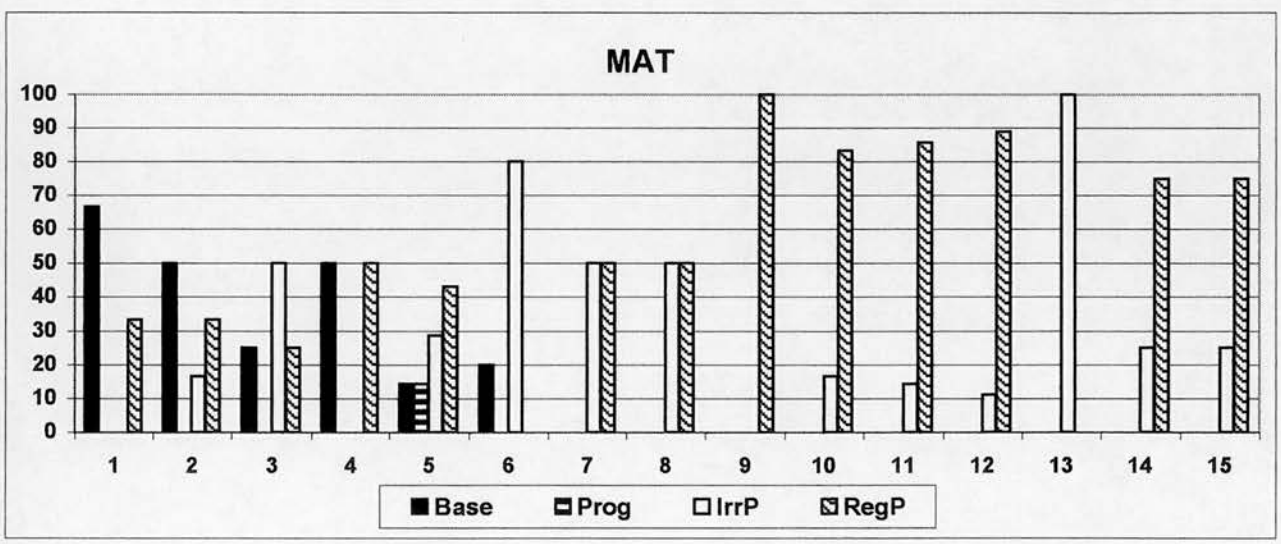
BER

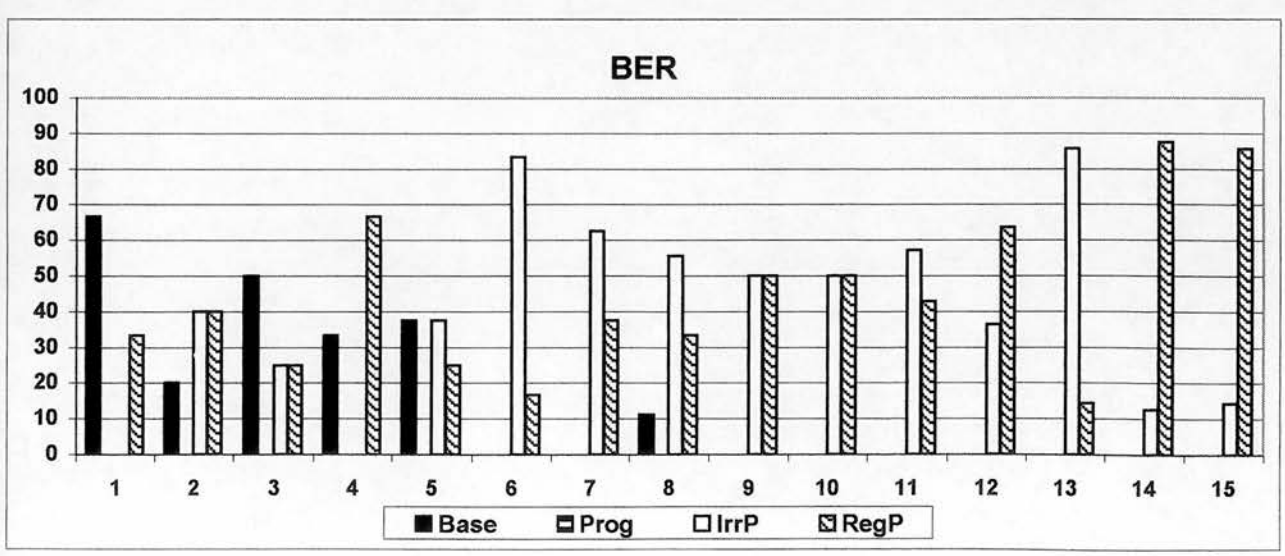
N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	2	1	2	2	3	0	0	1	0	0	0	0	0	0	0
Prog	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IrrP	0	2	1	0	3	5	5	5	1	2	4	4	6	1	1
RegP	1	2	1	4	2	1	3	3	1	2	3	7	1	7	6
TOT	3	5	4	6	8	6	8	9	2	4	7	11	7	8	7

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Base	66.7	20	50	33.3	37.5	0	0	11.1	0	0	0	0	0	0	0
Prog	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IrrP	0	40	25	0	37.5	83.3	62.5	55.6	50	50	57.1	36.4	85.7	12.5	14.3
RegP	33.3	40	25	66.7	25	16.7	37.5	33.3	50	50	42.9	63.6	14.3	87.5	85.7

Figure 4.7: MARKING OF ACHIEVEMENTS (%)







Thus, the marking of achievements is mainly confined to the past, which initially competes with the base form. As to the past with achievements, the production of regular forms exceeds that of irregular ones, especially in DAN and MAT. This explains why, in these two children, the regular past is more biased towards achievements than the irregular past.

4.2 L2 ITALIAN DATA

4.2.1 Across-category analysis

The verb forms produced by the L2 Italian children are: the infinitive, the present, the bare past participle, the compound past and the imperfect. These are quantified in the table below.

Table 4.11: Number of L2 Italian verb tokens

	LOU	FER	HEL	TOTAL
INF	14	6	11	31
PRES	54	9	16	79
BARE PP	168	168	221	557
CP	61	174	128	363
IMPF	112	87	79	278
TOTAL	409	444	455	1308

The verb forms investigated through the across-category analysis are: the bare past participle, the compound past and the imperfect. This approach analyzes the spread of these verb forms across the four Vendlerian classes. Table 4.12 displays the number of tokens employed in this analysis. As for the base form in L2 English, the infinitive and the present tense will not be considered for the across-category analysis. However, they will be included in the within-category analysis (see 4.2.2), where the focus is on morphological development.

Table 4.12: Number of L2 Italian tokens in the across-category analysis

	LOU	FER	HEL	TOTAL
BARE PP	168	168	221	557
CP	61	174	128	363
IMPF	112	87	79	278
TOTAL	341	429	428	1198

Next, I will describe the spread of these three verb forms, starting from the bare past participle.

4.2.1.1 The bare past participle

The bare past participle is prevalent with telic predicates, especially accomplishments. Among them, the motional predicate *andare* ('go') is very frequent. In HEL, who produced the highest number of bare past participles, *andare* is the most frequent accomplishment in the bare past participle (33/104).

(4-82) a. HEL1: io andato al giardino.
I go-PP to.the garden
'I went into the garden'.

b. FER3: e andato a casa sul bus
and go-PP to home on.the bus
'and I went home on the bus'.

c. INV: allora # raccontami il tuo finesettimana.
well tell.me the your weekend
'well, tell me about your weekend'.

LOU7: andato in montagna venerdì.
go-PP in mountain Friday
'I went to the mountain on Friday'.

d. HEL8: io andato su tutti li giochi.
I go-PP on all the games
'I went on all the games'.

e. FER13: e dopo A. e la mia mamma e il mio papà
and then and the my mum and the my dad
andato a il bar.

go-PP to the bar
'and then A. and my mum and my dad went to the bar'.

f. HEL15: io andato su mia camera
I go-PP up my bedroom
e leggiuto.
and read-PP
'I went upstairs in my bedroom and read'.

Fare ('do/make' – 4-83) and *mangiare* ('eat' – 4-84), followed by a defined object also occur regularly in the bare past participle form.

(4-83) a. FER4: dopo fatto il disegno.
then make.PP the drawing
'then I made the drawing'.

b. HEL9: Biancaneve fatto la torta.
Snow.White make.PP the cake
'Snow White made a cake'.

c. INV: cosa ha fatto quest'uomo?
what have.PRES.3sg do.PP this man
'what did this man do?'

LOU11: ballava
dance-IMPF-3sg
uh cantava
sing-IMPF-3sg
fatto i giochi
make.PP the games
raccontato le storie.
tell-PP the stories
'he was dancing, singing, he made games and told stories'.

(4-84) a. HEL4: poi suono il piano
then play-PRES-1sg the piano
uh io mangiato la cena
I eat-PP the dinner
e andato a letto.

and go-PP to bed
'then I played the piano, ate the dinner and went to bed'.

b. INV: e tutti gli altri?
'and all the others?'
FER5: mangiato la torta.
eat-PP the cake
'they ate the cake'.

c. LOU6: tutti mangiato i biscotti.
everybody eat-PP the biscuits
'everybody ate the biscuits'.

Other recurrent accomplishments in the past participle include manner-of-movement verbs, i.e. *correre* ('run'- 4-85), *volare* ('fly'- 4-86), *saltare* ('jump'- 4-87), followed by a directional phrase or particle. The bare past participle of *correre* surfaced in the regularized form *corruto* instead of the standard irregular form *corso*.

(4-85) a. HEL1: le zebre corruto sulla collina.
the zebras run-PP on.the hill
'the zebras ran to the hill'.

b. LOU9: il gatto corruto sotto mio letto.
the cat run-PP under my bed
'the cat ran under my bed'.

c. FER12: Bugs Bunny ha dato un pugno
have.PRES.3sg give-PP a punch
al soldato e poi corruto via.
to.the soldier and then run-PP away
'Bugs Bunny punched the soldier and then ran away'.

(4-86) a. INV: e l'asino +..?
'and the donkey?'
LOU6-FER6-HEL6: volato su fiore.
fly-PP on flower
'he flied on the flower'.

b. INV: le api [beep] fuori dagli alveari.

the bees out of.the beehives
'the bees [beep] out of the beehives'.
LOU7-FER7-HEL7: volato.
fly-PP
'flied'.

(4-87) a. FER8: la gente scappato
the people run.away-PP
e un uomo saltato nel fosso.
and a man jump-PP in.the ditch
'the people ran away and a man jumped in the ditch'.
INV: e l' uomo?
and the man
'and the man?'

b. LOU8-HEL8: saltato nel fosso.
jump-PP in.the ditch
'he jumped in the ditch'.

c. INV: Piggy [beep] nel lago.
'Piggy [beep] in the lake'.
LOU12: saltato.
jump-PP
'jumped'.

Among achievements, the bare past participle is generally found with those indicating change of location, i.e. *cadere* ('fall'- 4-88), *arrivare* ('arrive'- 4-89), *scappare* ('escape/run away'- 4-90).

(4-88) a. INV: e l' albero brutto?
and the tree ugly
'and the ugly tree?'
LOU2-FER2-HEL2: caduto.
fall-PP
'it fell'

b. FER6: io caduto.
I fall-PP
'I fell'

c. HEL12: io caduto vicino a una grotta.
I fall-PP next to a cave
'I fell next to a cave'.

(4-89) a. INV: poi l' inverno +...
then the winter
'then the winter…'
FER3: ++ arrivato.
arrive-PP
'… arrived'.

b. LOU6: e dopo mio papà arrivato.
and then my dad arrive-PP
'and then my dad arrived'.

c. HEL10: il principe arrivato.
the prince arrive-PP
'the prince arrived'.

(4-90) a. INV: e l' albero bello?
and the tree beautiful
'and the beautiful tree?'
LOU2-FER2-HEL2: scappato.
escape-PP
'it escaped'.

b. INV: ma il diavoletto +...
but the little.devil
'but the little devil…'
LOU2-FER2: ++ scappato via.
run-PP away
'he ran away'.

Other achievements in the bare past participle include those expressing an instantaneous change of state or condition, such as *trovare* ('find'- 4-91), *svegliarsi* ('wake up'- 4-92), *morire* ('die'- 4-93).

(4-91) a. INV: la settimana scorsa # Jasper [beep] un fagiolo.
the week last a bean

'last week Jasper [beep] a bean'.

LOU3-FER3-HEL3: trovato.
find-PP
'found'.

b. INV: e la polizia +...
and the police
'and the police…'

LOU5-FER5-HEL5: ++ trovato la torta.
find-PP the cake
'…found the cake'.

Svegliarsi is generally de-reflexivized, i.e. it is deprived of its reflexive clitic.

(4-92) a. LOU2: stamattina io svegliata alle sette.
this.morning I woke.up-PP-Fsg at.the seven
'this morning I woke up at seven'.

b. INV: e Bambi?
'and Bambi?'

HEL7: svegliato
woke.up-PP
e uscito.
and go.out-PP
'he woke up and went out'.

c. INV: stamattina Paddington [beep] alle sette.
'this morning Paddington [beep] at seven'

LOU8-FER8: svegliato.
woke.up-PP
'woke up'

In (4-93), the past participle of *morire* emerged in a regularized form (*morito, morita*) instead of the target irregular form *morto,* which would be *morta* in this particular case.

(4-93) a. INV: e Biancaneve?
'and Snow White?'

LOU9: mangiato la mela
eat-PP the apple

'she ate the apple'.

INV: e poi?
'and then?'

LOU9: morito.
die-PP
'she died'

b. FER9: Biancaneve morita.
Snow.White die-PP-Fsg
'Snow White died'.

c. HEL9: Biancaneve morito.
Snow.White die-PP
'Snow White died'.

The link between telicity and bare past participle is stronger in LOU than in FER and HEL. In LOU, the bare past participle is almost exclusively restricted to telic predicates whereas in FER and especially in HEL it also encodes activities from S1.

(4-94) a. FER1: qualcuno aiutato.
somebody help-PP
'somebody helped'.

b. FER2: venerdì ho andato a scuola
Friday have.PRES.1sg go-PP to school
e fatto inglese.
and do-PP English
'last Friday I went to school and did English'.

c. HEL2: guardato la televisione.
watch-PP the television
'I watched television'.

d. HEL3: io scritto un po' di parole
I write.PP a few of words
e fatto tick@l1 tick@l1 tick@l1.
and do.PP
'I wrote some words and did tick, tick, tick'.

From S5-S6, FER and HEL extend the bare participle to states, especially to those indicating perception (4-95a) and desire (4-95b).

Table 4.13: SPREAD OF BARE PAST PARTICIPLE

LOU

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0
ACT	0	0	0	0	0	0	1	2	0	1	0	0	0	0	1
ACC	2	7	5	5	8	10	10	8	8	5	3	8	3	3	6
ACH	3	5	4	4	5	7	6	5	4	4	3	6	3	3	7
TOT	5	12	9	9	13	17	17	15	12	11	6	15	6	7	14

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	0	0	0	9.09	0	6.67	0	14.3	0
ACT	0	0	0	0	0	0	5.88	13.3	0	9.09	0	0	0	0	7.14
ACC	40	58.3	55.6	55.6	61.5	58.8	58.8	53.3	66.7	45.5	50	53.3	50	42.9	42.9
ACH	60	41.7	44.4	44.4	38.5	41.2	35.3	33.3	33.3	36.4	50	40	50	42.9	50

FER

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	2	3	1	1	2	0	2	0	1	1
ACT	1	2	1	1	2	1	0	0	1	1	0	1	2	1	0
ACC	5	6	7	8	6	7	6	8	4	3	2	5	4	3	5
ACH	6	4	3	2	9	6	5	8	2	4	3	2	2	3	3
TOT	12	12	11	11	17	16	14	17	8	10	5	10	8	8	9

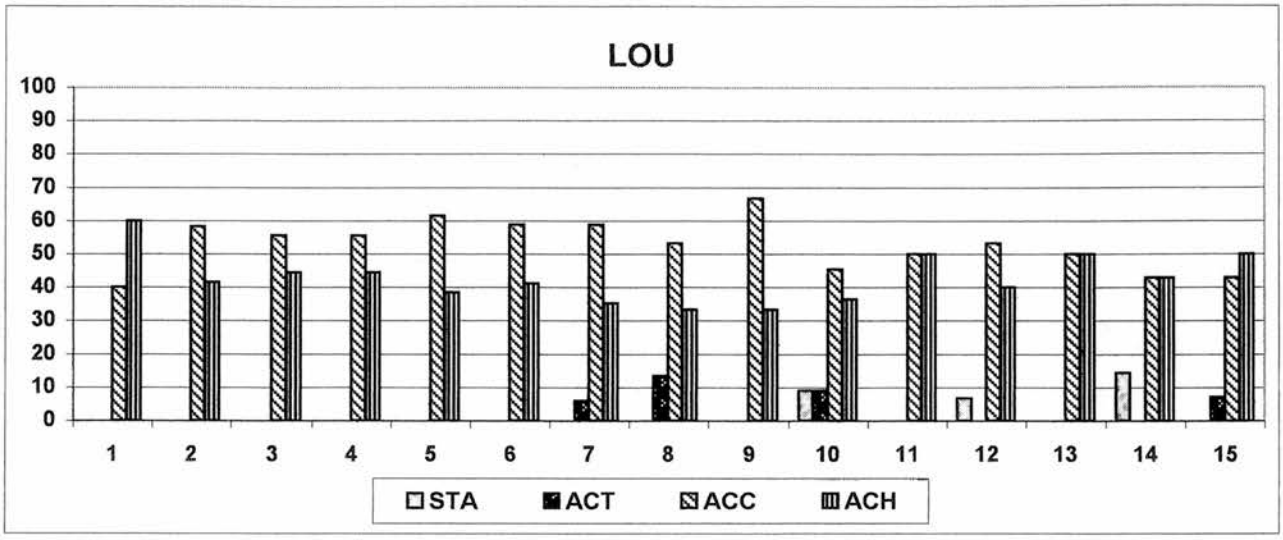
%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	12.5	21.4	5.88	12.5	20	0	20	0	12.5	11.1
ACT	8.33	16.7	9.09	9.09	11.8	6.25	0	0	12.5	10	0	10	25	12.5	0
ACC	41.7	50	63.6	72.7	35.3	43.8	42.9	47.1	50	30	40	50	50	37.5	55.6
ACH	50	33.3	27.3	18.2	52.9	37.5	35.7	47.1	25	40	60	20	25	37.5	33.3

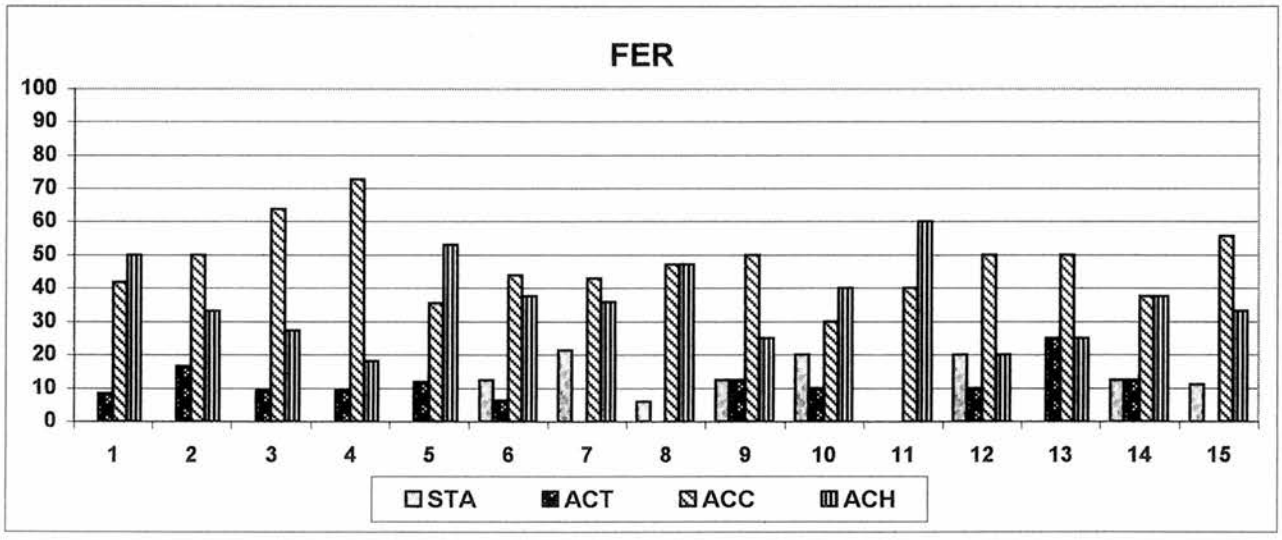
HEL

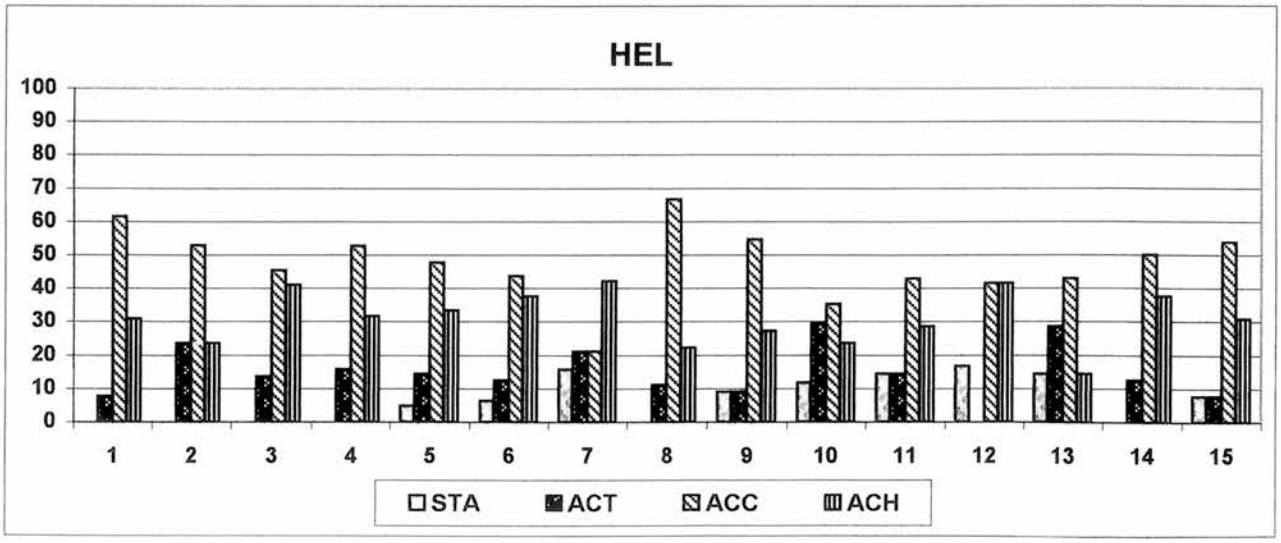
N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	1	1	3	0	1	2	1	2	1	0	1
ACT	1	4	3	3	3	2	4	2	1	5	1	0	2	1	1
ACC	8	9	10	10	10	7	4	12	6	6	3	5	3	4	7
ACH	4	4	9	6	7	6	8	4	3	4	2	5	1	3	4
TOT	13	17	22	19	21	16	19	18	11	17	7	12	7	8	13

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	4.76	6.25	15.8	0	9.09	11.8	14.3	16.7	14.3	0	7.69
ACT	7.69	23.5	13.6	15.8	14.3	12.5	21.1	11.1	9.09	29.4	14.3	0	28.6	12.5	7.69
ACC	61.5	52.9	45.5	52.6	47.6	43.8	21.1	66.7	54.5	35.3	42.9	41.7	42.9	50	53.8
ACH	30.8	23.5	40.9	31.6	33.3	37.5	42.1	22.2	27.3	23.5	28.6	41.7	14.3	37.5	30.8

Figure 4.8: SPREAD OF BARE PAST PARTICIPLE (%)







(4-95) a. INV: com' era Tamburino?
how be.IMPF.3sg
'how was Tamburino?'.
FER7-HEL7: sembrato contento.
look-PP happy
'he looked happy'.

b. INV: Foxie [beep] prendere Rosie.
'Foxie [beep] to catch Rosie'.
FER7-HEL7: voluto.
want-PP
'wanted'.

Although biased towards telic predicates, in FER and HEL the bare past participle competes with the compound past to fulfil the function of 'default past tense'. The crucial difference between the bare past participle and the compound past is that the presence of an auxiliary in the latter conveys tense marking. What emerges from these two children's spontaneous narratives is a tendency to use the bare past participle after the compound past in coordinates joined by *e* ('and').

(4-96) a. FER1: ho andato
have.PRES.1sg go-PP
e **portato** i poster con i cavalli.
and bring-PP the poster with the horses
'I went and brought the posters with the horses'.

b. FER3: ho mangiato
have.PRES.1sg eat-PP
e **fatto** la compito.
and do.PP the homework
'I ate and did my homework'.

c. FER4: poi ho andato a casa
then have.PRES.1sg go-PP to home
e **mangiato** caroti e pollo
and eat-PP carrots and chicken
e dopo **tornato** qui.
and then come.back-PP here

'then I went home and ate carrots and chicken and then I came back here'.

d. FER6: dopo ho andato a casa
then have.PRES.1sg go-PP to home
e **mangiato.**
and eat-PP
'then I went home and ate'.

(4-97) a. HEL5: la parrucchiera ha fatto un po' corto
the hairdresser have.PRES.3sg do.PP a bit short
e mio papà **piaciuto** mio capelli.
and my dad like-PP my hair
'the hairdresser did it a bit short and my dad liked my hair'.

b. HEL11: la mattina mio fratello ha entrato
the morning my brother have.PRES.3sg enter-PP
in mia camera e **detto** +
in my bedroom and say.PP
"tu vuoi venire giù? +".
you want come.INF down
'in the morning my brother came into my bedroom and said "do you want to come downstairs?"'.

c. HEL13: il bambino ha voluto sparare
the boy have.PRES.3sg want-PP shoot-INF
a Bugs Bunny
at
e Bugs Bunny **buttato** nel fiume.
and throw-PP in.the river
'the boy wanted to shoot Bugs Bunny and Bugs Bunny threw himself in the river'.

d. HEL15: io ha preso dentro mio uovo una
I have.PRES.3sg take.PP inside my egg a
mini-armonica e io **entrato** in giardino.
mini+harmonica and I enter-PP in garden
'I took a mini-harmonica from inside my egg and went into the garden'.

The examples above show that the bare past participle following a compound past can appear with telic predicates or atelic predicates. Telic predicates are *portato* (4-96a), *fatto la compito* (4-96b), *tornato* (4-96c), *buttato nel fiume* (4-97c), *entrato* (4-97d). Atelic predicates are *mangiato caroti e pollo* (4-96b), *mangiato* (4-96d), *piaciuto* (4-97a), *detto* (4-97b). In HEL this tendency is counterbalanced by the conservative tendency to a systematic use of the bare past participle in spontaneous narratives. It should be noted that in HEL the tokens of the bare past participle outnumber those of the compound past by a ratio of 1.7 to 1.

(4-98) a. HEL9: io mangiato un po' di torta
I eat-PP a bit of cake
uh soffiato mio candeli
blow-PP my candles
spengiuto tutti
blow.out-PP all
poi guardato la televisione
then watch-PP the television
mangiato un po' di pasta e sugo
eat-PP a bit of pasta and sauce
e andato a letto.
and go-PP to bed
'I ate some cake, blew on the candles, blew them all out, then watched television, ate some pasta and sauce and went to bed'.

b. HEL10: e io andato a casa
and I go-PP to home
e mangiato di pollo
and eat-PP PARTIT chicken
e io fatto uno piccolino villaggio per mia
and I make.PP a tiny village for my
sorella a uh uh come si dice
sister at how IMPRS say.PRES-3sg
coloured@l1 blocks@l1?
'and I went home, ate some chicken, made a tiny village for my sister with...how do you say coloured blocks?'

INV: cubetti colorati.
HEL10: io fatto mio piano
I do.PP my piano
uh io fatto le canzoni
I do.PP the songs
e una di le canzoni io chiamo +
and one of the songs I call
" when the saints go marching in +".
'I did my piano, I did the songs and one of the songs is called "when the saints go marching in"'.

The table below summarizes the occurrences of the bare past participle (PP) and compound past (CP) in single main clauses (SMC) vs. coordinates joined by *e* ('and).

Table 4.14: The bare past participle and compound past in main vs. coordinate clauses

	LOU	FER	HEL
PP (SMC)	145	141	158
CP (SMC)	60	162	126
PP+e+PP	6	6	15
PP+e+CP	0	0	0
CP+e+PP	12	43	42
CP+e+CP	0	3	2

The bare past participle can appear in single main clauses as well as in coordinates with the structure PP+*e*+PP and CP+*e*+PP. In LOU and HEL, the bare past participle outnumbers the compound past in single main clauses. HEL produced the highest number of bare past participles in single main clauses and in coordinates with the structure PP+*e*+PP. The pattern CP+*e*+PP is stronger in FER and HEL, especially in spontaneous conversation, where the need for narrative scaffolding is more compelling than in controlled, pre-structured tasks. In fact, the children generally produced single main clauses in controlled tasks. Interestingly, in controlled tasks, FER and HEL started to use the pattern CP+*e*+PP late (S12), when their narratives become less dependant on the researcher's prompts.

The pattern CP+*e*+PP can also be construed as auxiliary gapping in coordinates joined by *e* ('and'), which would mean that the past participle after *e* is not genuinely 'bare'. Although this could be true for this particular pattern, auxiliary gapping cannot be assumed across the board. Findings show developmental and individual variation: the bare past participle emerges before the compound past, whose point of appearance and frequency of use vary considerably in each child (see 4.2.1.2). As mentioned above, there is also task variation: the bare past participle and the compound past tend to appear in different types of tasks. Furthermore, the bare past participle is present in single main clauses and in coordinates with the structure PP+*e*+PP, where there is no visible auxiliary to be gapped. Thus, the bare past participle can be considered as a default past tense: it is used to express past time reference, a function for which it competes with the compound past. The compound past is seldom found after the coordinator *e*; indeed, it is never found in coordinates with the structure PP+*e*+CP. In FER, the compound past is the most frequent form to appear in single main clauses.

Unlike the bare past participles of unaccusatives in child Italian (see 2.1.2), the bare past participles of these Anglophone children are generally deprived of morphological agreement with the subject of unaccusatives. Unaccusative verbs were presented in 1.3.1.1 and will also be discussed in 4.2.1.2. Table 4.15 illustrates the presence or absence of morphological agreement (PP Agr) on the bare past participle of unaccusatives with subjects other than masculine singular. Interestingly, FER, who produced the highest number of agreed bare past participles, also produced the highest number of compound pasts with *essere* (see Table 4.19).

Table 4.15: Morphological agreement on the bare past participle of unaccusatives*

	LOU	FER	HEL	TOTAL
[+] PP Agr	7	13	5	25
[-] PP Agr	20	26	49	95
TOTAL	27	39	54	120

* Unaccusatives with subjects other than masculine singular

To sum up, the bare past participle is preferably found with telic predicates, accomplishments in particular. However, it can also be found with atelic predicates, especially in FER and HEL. Specifically, these two children tend to produce the bare past participle after the compound past in coordinates with the structure CP+*e*('and')+PP. Finally, the bare past participle of unaccusatives is predominantly left unmarked. More on the unaccusatives next, where the compound past is analyzed.

4.2.1.2 The passato prossimo

If the bare past participle is generally linked to telic predicates, the compound past appears to be more evenly distributed between telic and atelic predicates, although a systematic marking of states begins only from S10, especially in FER and HEL. The point of appearance of the compound past varies for each child: in FER it is present since S1 (4-99), in HEL it surfaces in S4 (4-100) and in LOU in S8 (4-101).

(4-99) a. FER1: ho andato a una festa di cavalli piccoli
have.PRES.1sg go-PP to a party of horses small
e grande.
and big
'I went to a party of big and small horses'

b. FER1: ho mangiato un gelato.
have.PRES.1sg eat-PP an ice.cream
'I ate an ice-cream'.

c. FER3: ieri una mia amica di America
yesterday a my friend from
ha venuta alla mia casa.
have.PRES.1sg come.PP-Fsg to.the my home
'yesterday, a friend of mine from America came to my home'.

(4-100) a. HEL4: lui ha prendato tanti di uh +...
he has.3sgPRES get-PP a.lot of
+, come si dice presents@l1?

how IMPRS say.PRES-3sg
'he got a lot of uh how do you say presents?'

b. HEL5: io ho andato sul pullman.
I have.PRES.1sg go-PP on.the bus
'I went on the bus'.

c. HEL6: ho guardato un po' di film
have.PRES.1sg watch-PP a bit of film
alla televisione.
at.the television
'I watched a bit of film on the television'.

(4-101) a. LOU8: mercoledì io ho andato a cavallo.
wednesday I have.PRES.1sg go-PP on horse
'on Wednesday I went on a horse'.

b. LOU9: venerdì mio mamma ha portato il gatto
Friday my mum have.PRES.1sg take-PP the cat
al veterinario.
to.the veterinary
'on Friday, my mum took the cat to the veterinary'.

c. LOU10: io ho stato sul cavallo un' ora.
I have.PRES.1sg stay-PP on.the horse one hour
'I stayed on the horse for one hour'.

Individual variation was also noticed in the frequency of the compound past: if in LOU it is still an emerging tense, in FER and HEL it competes with the bare past participle for the function of 'default past tense'. However, in these two children, the frequency of the compound past varies developmentally. In FER, the growth of the compound past is generally constant throughout the study, whereas in HEL, it increases dramatically from S11. Furthermore, the compound past in these two children is subject to task variation in that they used it in spontaneous speech more frequently than in controlled tasks. In fact, in the controlled tasks, both FER and HEL first used the compound past in S9. This suggests that the choice and function of this verb form can be influenced by the demands of the task.

Table 4.16: SPREAD OF COMPOUND PAST

LOU

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1
ACT	0	0	0	0	0	0	0	0	4	1	1	4	4	5	2
ACC	0	0	0	0	0	0	0	1	3	2	2	3	4	6	7
ACH	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2
TOT	0	0	0	0	0	0	0	1	7	4	3	10	11	13	12

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	####	####	####	####	####	####	####	0	0	25	0	10	9.09	0	8.33
ACT	####	####	####	####	####	####	####	0	57.1	25	33.3	40	36.4	38.5	16.7
ACC	####	####	####	####	####	####	####	100	42.9	50	66.7	30	36.4	46.2	58.3
ACH	####	####	####	####	####	####	####	0	0	0	0	20	18.2	15.4	16.7

FER

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	1	0	0	3	1	1	4	4	2
ACT	0	1	2	2	1	2	0	2	5	3	3	6	4	3	3
ACC	4	3	4	5	4	4	6	6	6	9	5	9	9	5	9
ACH	0	0	0	0	3	3	1	2	3	1	2	6	3	3	6
TOT	4	4	6	7	8	9	8	10	14	16	11	22	20	15	20

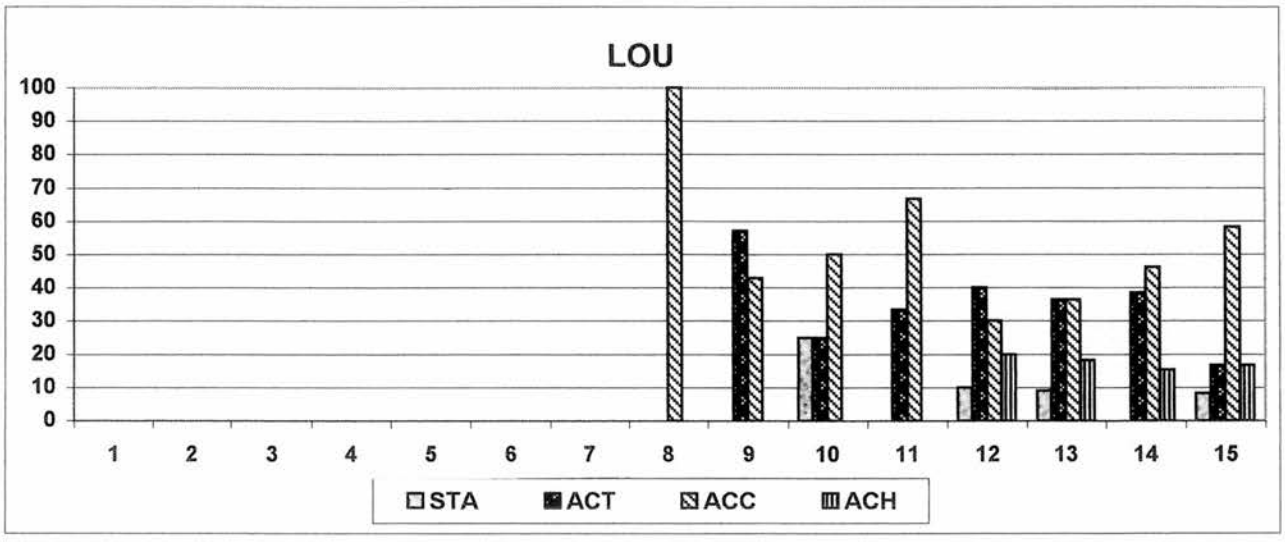
%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	12.5	0	0	18.8	9.09	4.55	20	26.7	10
ACT	0	25	33.3	28.6	12.5	22.2	0	20	35.7	18.8	27.3	27.3	20	20	15
ACC	100	75	66.7	71.4	50	44.4	75	60	42.9	56.3	45.5	40.9	45	33.3	45
ACH	0	0	0	0	37.5	33.3	12.5	20	21.4	6.25	18.2	27.3	15	20	30

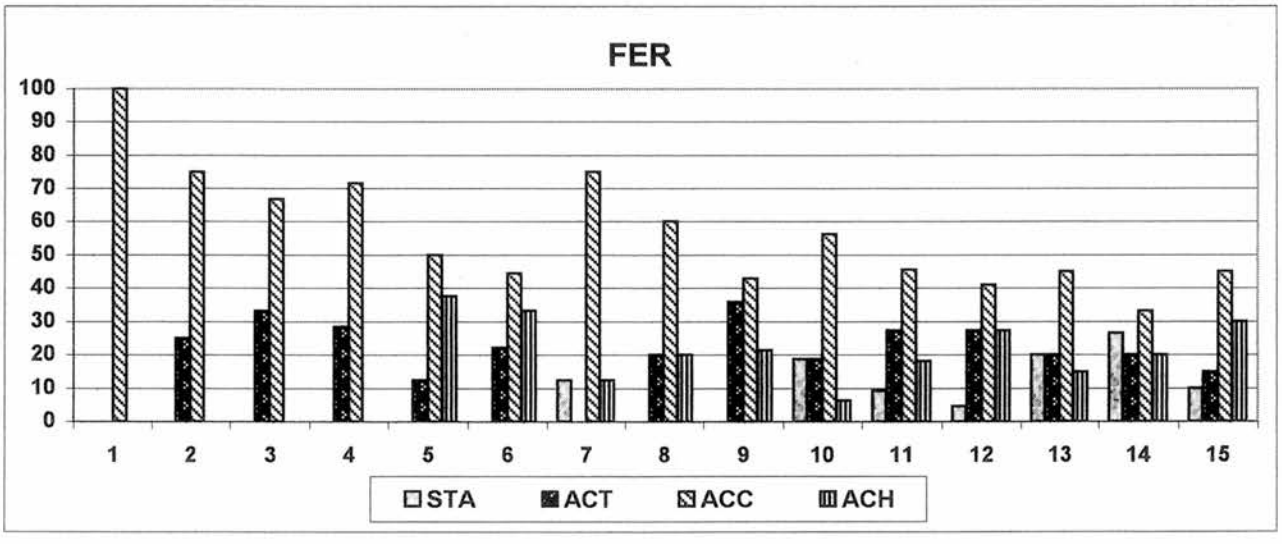
HEL

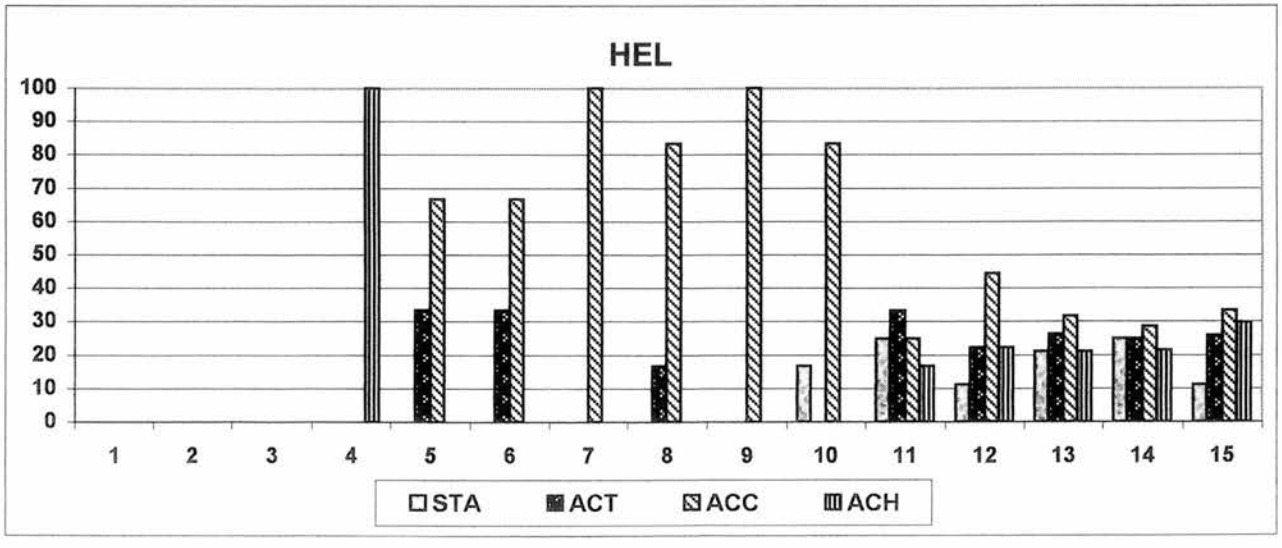
N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	0	0	0	1	3	2	4	7	3
ACT	0	0	0	0	1	1	0	1	0	0	4	4	5	7	7
ACC	0	0	0	0	2	2	2	5	4	5	3	8	6	8	9
ACH	0	0	0	1	0	0	0	0	0	0	2	4	4	6	8
TOT	0	0	0	1	3	3	2	6	4	6	12	18	19	28	27

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	####	####	####	0	0	0	0	0	0	16.7	25	11.1	21.1	25	11.1
ACT	####	####	####	0	33.3	33.3	0	16.7	0	0	33.3	22.2	26.3	25	25.9
ACC	####	####	####	0	66.7	66.7	100	83.3	100	83.3	25	44.4	31.6	28.6	33.3
ACH	####	####	####	100	0	0	0	0	0	0	16.7	22.2	21.1	21.4	29.6

Figure 4.9: SPREAD OF COMPOUND PAST (%)







As shown in 4.2.1.1, the bare past participle is often found after a compound past in coordinates with *e* ('and'). In this pattern compound past-bare past participle, the compound past is generally used to express anteriority. More examples are provided below, in addition to those presented in 4.2.1.1.

(4-102) a. FER2: ho andato a casa
have.PRES.1sg go-PP to home
e giocato con J.
and play-PP with
'I went home and played with J.'

b. FER5: quando ho andato un giro o due giri
when have.PRES.1sg go-PP one lap or two laps
Peanuts impennato
rear-PP
e caduto sulla testa.
and fall-PP on.the head
'when I went a lap or two, Peanuts reared and I fell on my head'.

c. FER6: i cacciatori ha sparato
the hunters have.PRES.3sg fire-PP
e Ghibli si spaventato.
and REFL scare-PP
'the hunters fired and Ghibli got scared'.

d. FER8: io ho caduto
I have.PRES.1sg fall-PP
e un.altro caduto
and another fall-PP
e un.altro piccolo bambino venuto
and another little boy come.PP
e fermato.
and stop-PP
'I fell and somebody else fell and another little boy came and stopped'.

e. FER12: ho andato a casa
have.PRES.1sg go-PP to home
e mangiato
and eat-PP

e andato a letto.
and go-PP to bed
'I went home and ate and went to bed'

(4-103) a. HEL11: mio fratello ha sentito i passi
my brother have.PRES.1sg hear-PP the steps
e lui andato giù
and he go-PP down
'my brother heard the steps and went downstairs.

b. HEL12: ha piangiuto
have.PRES.3sg cry-PP
e Bugs Bunny si sentito dispiaciuto
and REFL feel-PP sorry
e dato una bacio al soldato.
and give-PP a kiss to.the soldier
'he cried and Bugs Bunny felt sorry and gave a kiss to the soldier'.

c. HEL14: io ho dovuto prendere lei
I have.PRES.1sg have-PP to.take her
e andato dentro casa giù le scale
and go-PP into house down the stairs
e dentro il giardino.
and into the garden
'I had to take her and went into the house, down the stairs and into the garden'.

d. HEL14: mia mamma ha prenduto E.
my mum have.PRES.3sg take-PP
e mettuto E. sul letto.
and put-PP on.the bed
'my mum took E. and put E. on the bed'.

e. HEL15: io ho mangiato poco poco
I have.PRES.1sg eat-PP little little
e andato a guardar televisione.
and go-PP to watch-INF television
'I ate little little and went to watch television'.

Table 4.17: SPREAD OF 'AVERE' WITH INTRANSITIVE COMPOUND PAST

LOU

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1
ACT	0	0	0	0	0	0	0	1	2	1	0	0	4	2	0
ACC	0	0	0	0	0	0	0	0	1	1	1	1	1	2	0
ACH	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
TOT	0	0	0	0	0	0	0	1	3	3	1	2	6	5	2

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	####	####	####	####	####	####	####	0	0	33.3	0	50	16.7	0	50
ACT	####	####	####	####	####	####	####	100	66.7	33.3	0	0	66.7	40	0
ACC	####	####	####	####	####	####	####	0	33.3	33.3	100	50	16.7	40	0
ACH	####	####	####	####	####	####	####	0	0	0	0	0	0	20	50

FER

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	1	0	0	3	0	0	1	2	1
ACT	0	0	0	0	0	1	0	1	0	3	2	4	3	0	0
ACC	3	2	2	4	4	3	2	5	3	3	1	4	5	2	2
ACH	0	0	0	0	1	2	0	2	1	0	0	1	1	1	6
TOT	3	2	2	4	5	6	3	8	4	9	3	9	10	5	9

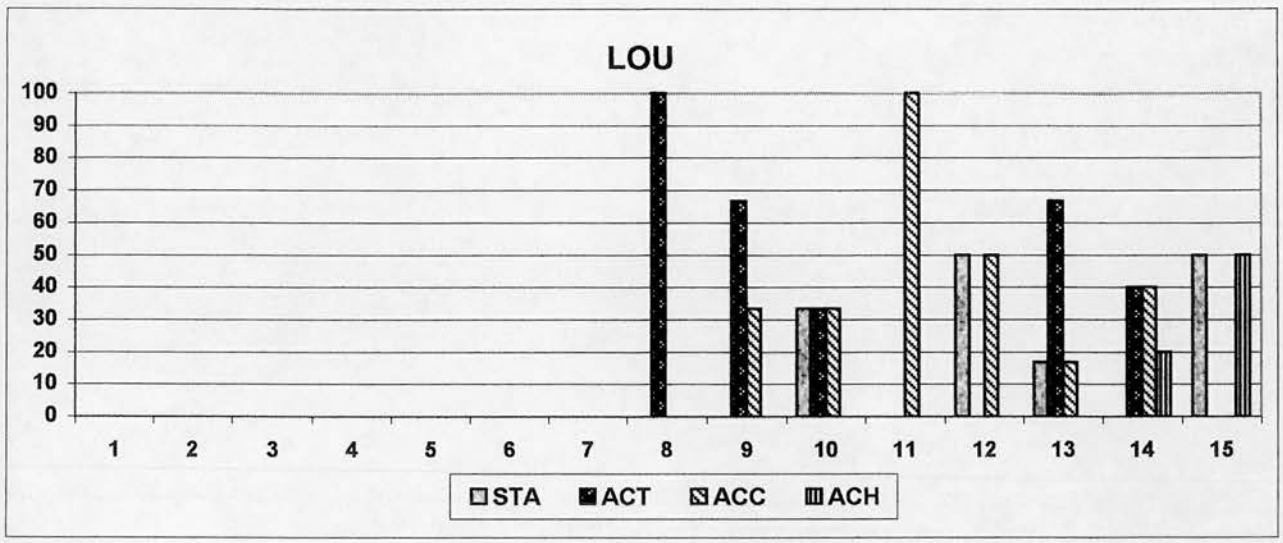
%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	33.3	0	0	33.3	0	0	10	40	11.1
ACT	0	0	0	0	0	16.7	0	12.5	0	33.3	66.7	44.4	30	0	0
ACC	100	100	100	100	80	50	66.7	62.5	75	33.3	33.3	44.4	50	40	22.2
ACH	0	0	0	0	20	33.3	0	25	25	0	0	11.1	10	20	66.7

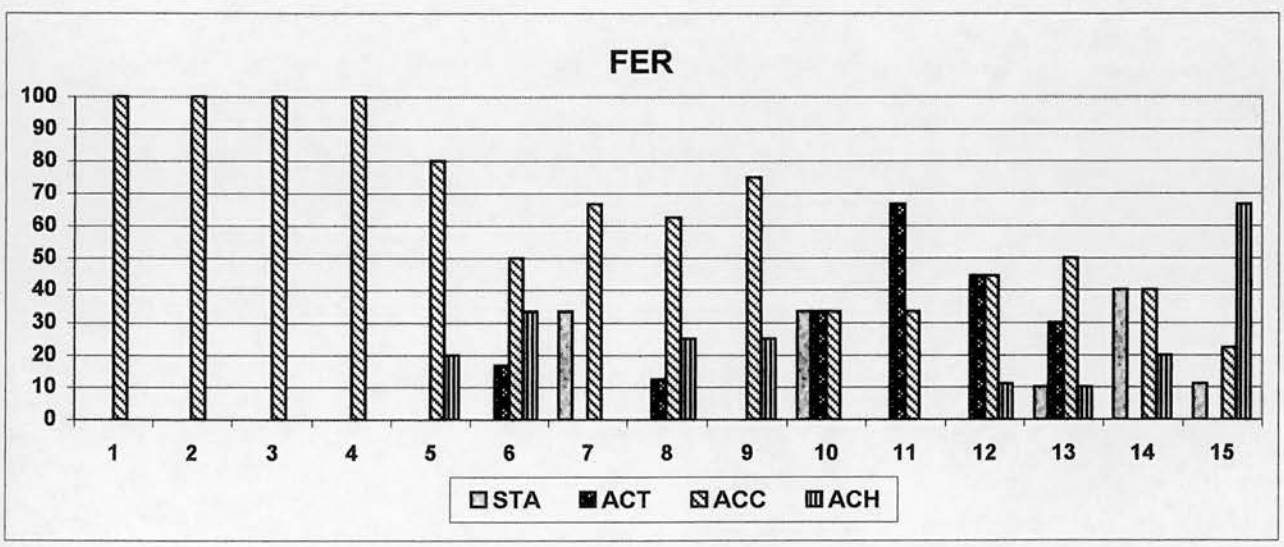
HEL

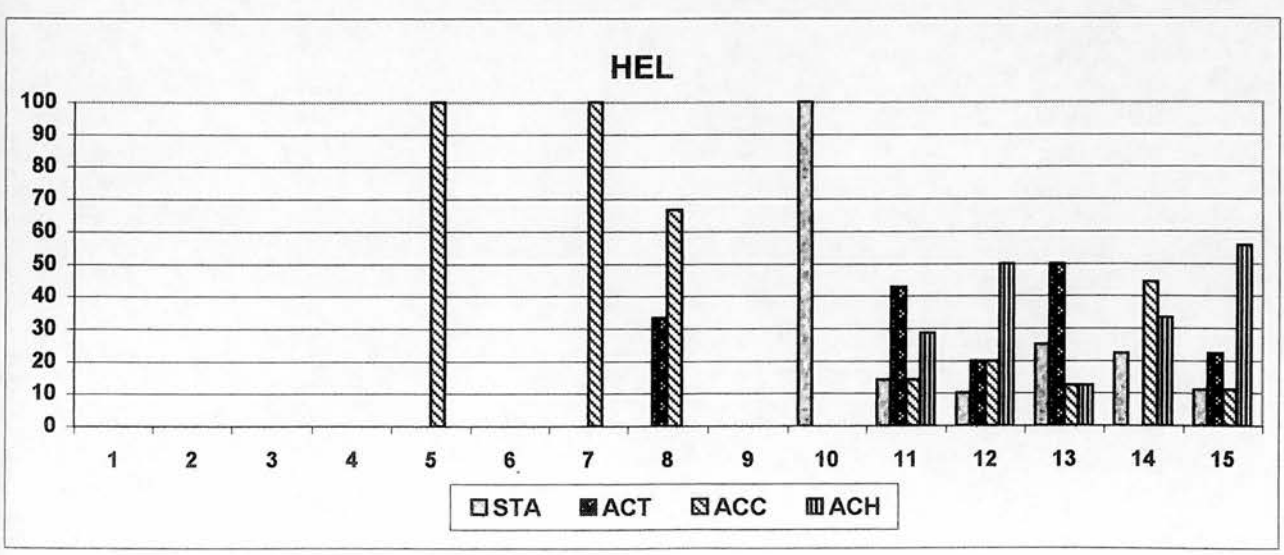
N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	0	0	0	0	0	0	0	0	0	1	1	1	2	2	1
ACT	0	0	0	0	0	0	0	1	0	0	3	2	4	0	2
ACC	0	0	0	0	2	0	2	2	0	0	1	2	1	4	1
ACH	0	0	0	0	0	0	0	0	0	0	2	5	1	3	5
TOT	0	0	0	0	2	0	2	3	0	1	7	10	8	9	9

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	####	####	####	####	0	####	0	0	####	100	14.3	10	25	22.2	11.1
ACT	####	####	####	####	0	####	0	33.3	####	0	42.9	20	50	0	22.2
ACC	####	####	####	####	100	####	100	66.7	####	0	14.3	20	12.5	44.4	11.1
ACH	####	####	####	####	0	####	0	0	####	0	28.6	50	12.5	33.3	55.6

Figure 4.10: SPREAD OF 'AVERE' WITH INTRANSITIVE COMPOUND PAST (%)







All these examples show that the children's *passato prossimo* is constructed with the auxiliary *avere*. As illustrated in 1.3.1.1, the *passato prossimo* can be formed by either *essere* or *avere*. Auxiliary selection affects intransitive verbs, which fall in two classes: unaccusatives selecting *essere* and unergatives selecting *avere*. These two classes can be defined according to lexical semantic criteria: unaccusatives are represented by telic predicates and states, whereas unergatives are represented by activities. In these L2 Italian learners, *avere* functions as a default auxiliary also occuring with intransitive telic and stative predicates, which would normally select *essere*.

Avere is overextended to change of location verbs such as *andare* ('go'- 4-104), *venire* ('come'- 4-105), *arrivare* ('arrive'- 4-106), *cadere* ('fall'- 4-107).

(4-104) a. FER4: dopo ho andato fuori.
then have.PRES.1sg go-PP out
'then I went out to play'.

b. FER7: ho andato a Inghilterra.
have.PRES.1sg go-PP to England
'I went to England'.

c. HEL7: ho andato a letto.
have.PRES.1sg go-PP to bed
'I went to bed'.

d. FER9: ho andato a sciare.
have.PRES.1sg go-PP to ski-INF
'I went to ski'.

e. LOU13: ho andato a negozi.
have.PRES.1sg to shops
'I went to shops'.

(4-105) a. FER3: dopo ho venuto qua.
then have.PRES.1sg come-PP here
'then I came here'.

b. HEL11: nella notte mio papà ha venuto
in.the night my dad have.PRES.3sg come.PP
con mio nonno e nonna.
with my grandpa and grandma

'in the night my dad came with my granpa and granma'.

c. FER15: la mia nonna e nonno
the my grandma and grandpa
ha venuto.
have.PRES.3sg come.PP
'my grandma and grandpa came'.

(4-106) a. INV: c' erano una volta tre capre di nome Gruff
there be.IMPF.3pl one time three goats of name
'once upon a time there were three goats named Gruff'.
un giorno le capre [beep] a un fiume.
one day the goats to a river
'one day they [beep] to a river'.
LOU15-FER15-HEL15: hanno arrivato.
have.PRES.3pl arrive-PP
'arrived'.

(4-107) a. FER5: io ho caduto sulla testa.
I have.PRES.1sg fall-PP on.the head
'I fell on my head'.

b. FER6: ho caduto due volte.
have.PRES.1sg fall-PP two times
'I fell twice'.

c. HEL13: il bambino ha caduto
the boy have.PRES.3sg fall-PP
dalla montagna.
from.the mountain
'the boy fell off the mountain'.

Intransitive states were also found with *avere*. An intransitive state such as *piacere* ('please', 'like') selects *essere* and is generally preceded by a dative, e.g. *La mostra mi è piaciuta*. Interestingly, in FER *piacere* selects *avere* and is transitivized.

(4-108) a. FER7: ho piaciuto molto mio vacanza di Natale.
have.PRES.1sg like-PP a.lot my holiday of Christmas

'I liked my Christmas holidays a lot'.

b. FER10: ho piaciuto Offlegs più di Tamburina
have.PRES.1sg like-PP more than
uh ho piaciuto andare cavallo.
have.PRES.1sg like-PP go-INF horse
'I liked Offlegs more than Tamburina, I liked going on a horse'.

c. FER14: ho piaciuto molto la festa.
have.PRES.1sg like-PP a.lot the party
'I liked the party a lot'.

Table 4.18 lists all the unaccusatives that the children produced with *avere* in the compound past. The majority of unaccusatives with *avere* is represented by telic predicates indicating change of location (70/120); these are: *andare* ('go'), *cadere* ('fall'), *venire* ('come'), *arrivare* ('arrive'), *ritornare* ('return'), *scappare* ('escape'), *entrare* ('enter'), *salpare* ('leave' -ship-). However, according to Sorace (2000 – see 1.3.1.1), verbs denoting change of location are core unaccusatives: as such, they should be systematic in their selection of *essere* and impervious to auxiliary shift. This discrepancy will be further discussed in 5.1.2.

The auxiliary *essere* surfaced in S14 for LOU, in S9 for FER and in S10 for HEL. Its occurrence is very marginal, especially in LOU and HEL. Table 4.19 lists all the tokens of intransitive verbs found with *essere* in the compound past. The session when they appeared is also indicated. Except for the statives *essere/stare* ('be/stay'), *sembrare* ('seem') and *parere* ('seem'), the *essere*-verbs produced by the children are all telic, indicating primarily change of location: *cadere* ('fall'), *andare* ('go'), *venire* ('come'), *scappare* ('escape'), *ritornare* ('return'), *uscire* ('go out'). However, it should be noted that, in the compound past, intransitive telics outnumber intransitive states by a ratio of 4.9 to 1. Tables 4.18 and 4.19 also show the presence of regularized non-standard past participles, such as *corruto* or *corruti* (*correre* 'run'), instead of *corso* or *corsi*; *moruto* or *morite* (*morire* 'die'), instead of *morto* or *morte*: *esploduto* (*esplodere* 'explode') instead of *esploso*; *rimanuto* (*rimanere* 'remain') instead of *rimasto*; *paruti* (*parere* 'seem/look), instead of *parsi*.

Table 4.18: Unaccusatives with *avere*

		LOU	FER	HEL	TOTALS	
ANDARE ('go')	ho andato	3	36	5	44	
	ha andato	0	1	0	1	45
ESSERE/STARE ('be/stay')	ho stato	2	0	0	2	
	ha stato	1	2	3	6	
	hanno stato	0	1	1	2	10
SALTARE ('jump') + DIR.	ha saltato	0	4	4	8	8
CADERE ('fall')	ho caduto	0	4	0	4	
	ha caduto	0	2	1	3	7
VOLARE ('fly') + DIR.	ha volato	2	1	1	4	
	hanno volato	0	2	1	3	7
VENIRE ('come')	ho venuto	1	2	0	3	
	ha venuto	0	1	1	2	
	ha venuta	0	1	0	1	6
ARRIVARE ('arrive')	ho arrivato	0	1	0	1	
	ha arrivato	1	0	0	1	
	hanno arrivato	1	1	1	3	5
DIVENTARE ('become')	ha diventato	1	0	2	3	
	hanno diventato	0	0	1	1	4
VIVERE ('live')	ha vivuto	1	1	1	3	
	ha vissuto	0	0	1	1	4
PIACERE ('like')	ho piaciuto	0	3	0	3	
	ha piaciuta	0	1	0	1	4
(RI)TORNARE ('return')	ho ritornato	0	1	0	1	
	ha (ri)tornato	1	0	1	2	3
APPARTENERE ('belong')	ha appartenuto	0	1	1	2	2
SPARIRE ('disappear')	ha sparito	0	1	1	2	2
CORRERE ('run') + DIR.	ha corruto	0	0	1	1	
	hanno corruto	0	0	1	1	2
SCAPPARE ('escape')	ha scappato	0	0	2	2	2
MORIRE ('die')	hanno moruto	0	1	0	1	1
AFFONDARE ('sink')	ha affondato	0	0	1	1	1
ANNEGARE ('drown')	ha annegato	0	0	1	1	1
CROLLARE ('collapse')	ha crollato	0	0	1	1	1
ENTRARE ('enter')	ha entrato	0	0	1	1	1
ESPLODERE ('explode')	ha esploduto	0	0	1	1	1
RIMANERE ('remain')	ha rimanuto	0	0	1	1	1
SALPARE ('leave' -ship-)	ha salpato	0	0	1	1	1
SEMBRARE ('seem/look')	ha sembrato	0	0	1	1	1
TOTALS		14	68	38	120	

Table 4.19: Unaccusatives with *essere*

		LOU	FER	HEL
CADERE ('fall')	S9		è caduto	
VENIRE ('come')	S9		è venuta	
	S12		è venuta	
	S13			è venuta
ANDARE ('go')	S10		sono andata	è andato
	S13		è andata	
USCIRE ('go out)	S12		è uscita	
SCAPPARE ('escape')	S12	è scappato	è scappato	
	S14		è scappato	
ESPLODERE ('explode')	S12		è esplosa	
ESSERE/STARE ('be/stay')	S12		è stato	
FINIRE ('finish')	S12		è finita	
SEMBRARE ('seem/look')	S13		è sembrato	
CORRERE ('run') + DIR.	S13		sono corruti	
AFFONDARE ('sink')	S14	è affondata		
MORIRE ('die')	S14	sono morte		sono morite
PARERE ('seem/look')	S14		sono paruti	sono paruti
(RI)TORNARE ('return')	S14	è ritornato	è ritornato	
SALPARE ('leave' -ship-)	S14		è salpato	
DIVENTARE ('become')	S15	sono diventate		

What emerges from observing the two tables above, is that in Table 4.18, 118 past participles out of 120 appear in the unmarked form of the masculine singular, whereas in Table 4.19, 15 past participles out of 25 are marked with gender and number agreement other than masculine singular. Specifically, a correlation between auxiliary selection and past participle agreement was found in the following: considering unaccusatives with subjects other than masculine singular, past participles preceded by *essere* agreed in gender and number with the subject, whereas those preceded by *avere* were virtually left unmarked.

Table 4.20: Correlation auxiliary - past participle agreement *

LOU	avere	essere	FER	avere	essere	HEL	avere	essere
[+]PPAgr	0	3	[+]PPAgr	2	9	[+]PPAgr	0	3
[-]PPAgr	8	0	[-]PPAgr	55	1	[-]PPAgr	17	0

* Unaccusatives with subjects other than masculine singular

Insterestingly, FER, who is female, produced 36 instances of *ho andato* and only one of *sono andata*. No instances of *ho andata* were recorded. To recapitulate, the compound past is normally formed by the auxiliary *avere*, which acts as a default auxiliary, and the

past participle. A correlation was found between auxiliary selection past participle agreement. The point of appearance and the distribution of the compound past are subject to individual and task variation. The compound past is generally spread across all lexical aspectual classes, although more biased towards accomplishments.

4.2.1.3 The imperfetto

The *imperfetto* occurred predominantly in controlled tasks, where the verbs were provided in the infinitive. From S3, the *imperfetto* is closely associated to activities in FER and HEL; in HEL, this link is strongest, with the *imperfetto* exclusively marking activities from S7. In LOU, who produced the highest number of *imperfetti*, the link *imperfetto*-activities is strongest from S5 to S11. Before S5 and after S11, activities compete with states to receive the marking of the *imperfetto*. Among activities in the *imperfetto*, motional verbs are conspicuous: *volare* ('fly'- 4-109), *guidare* ('drive'- 4-110a), *ballare* ('dance'- 4-110b&c, 112d), *camminare* ('walk'- 4-111), *correre* ('run'- 4-112a&d), *saltare* ('jump'- 4-112b,c&d), *pattinare* ('skate'- 4-112c).

(4-109) a. INV: e gli uccelli?
'and the birds?'
FER1: volava.
fly-IMPF-3sg
'it was flying'.

b. HEL1: volavano.
fly-IMPF-3pl
'they were flying'.

c. INV: e le foglie?
'and the leaves?'
FER2-HEL2: volavano.
fly-IMPF-3pl
'they were flying'.

d. LOU11: l' aereo volava.
the plane fly-IMPF-3sg
'the plane was flying'.

Table 4.21: SPREAD OF IMPERFECT

LOU

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	2	5	2	1	1	3	3	1	0	3	3	4	4	3	2
ACT	0	2	4	2	8	4	7	5	6	7	10	4	4	4	3
ACC	0	0	1	2	0	0	0	0	0	0	0	0	2	0	0
ACH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT	2	7	7	5	9	7	10	6	6	10	13	8	10	7	5

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	100	71.4	28.6	20	11.1	42.9	30	16.7	0	30	23.1	50	40	42.9	40
ACT	0	28.6	57.1	40	88.9	57.1	70	83.3	100	70	76.9	50	40	57.1	60
ACC	0	0	14.3	40	0	0	0	0	0	0	0	0	20	0	0
ACH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

FER

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	5	5	2	1	2	1	0	0	0	0	2	0	0	1	0
ACT	4	4	6	7	7	4	6	4	3	4	4	2	2	4	1
ACC	0	0	1	0	1	0	0	0	1	0	1	1	0	0	0
ACH	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
TOT	9	9	9	8	10	6	6	4	4	4	7	3	2	5	1

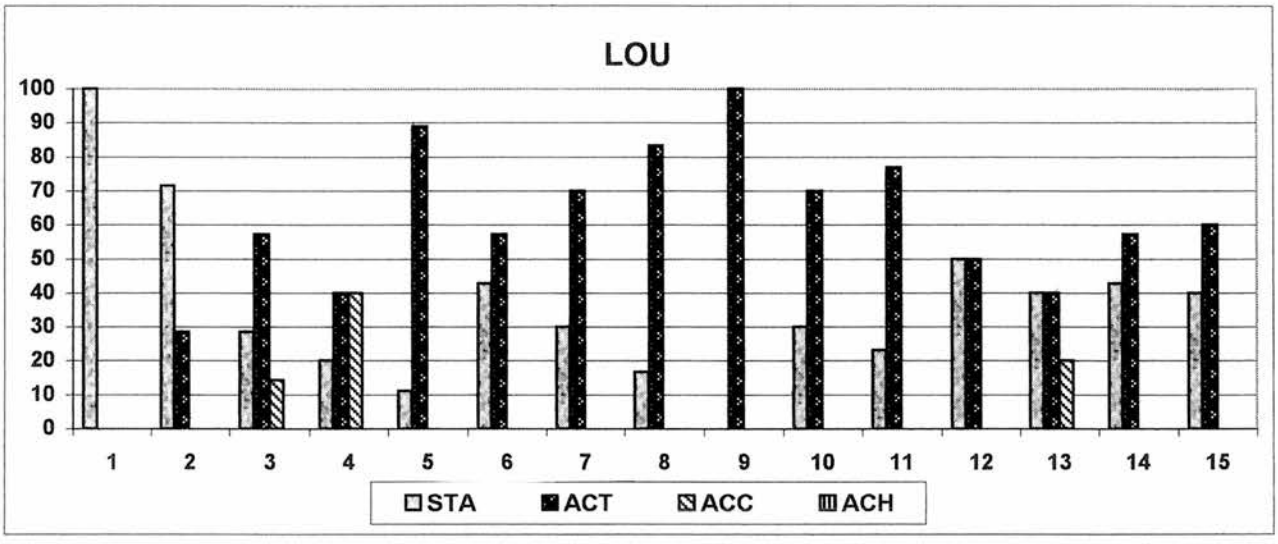
%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	55.6	55.6	22.2	12.5	20	16.7	0	0	0	0	28.6	0	0	20	0
ACT	44.4	44.4	66.7	87.5	70	66.7	100	100	75	100	57.1	66.7	100	80	100
ACC	0	0	11.1	0	10	0	0	0	25	0	14.3	33.3	0	0	0
ACH	0	0	0	0	0	16.7	0	0	0	0	0	0	0	0	0

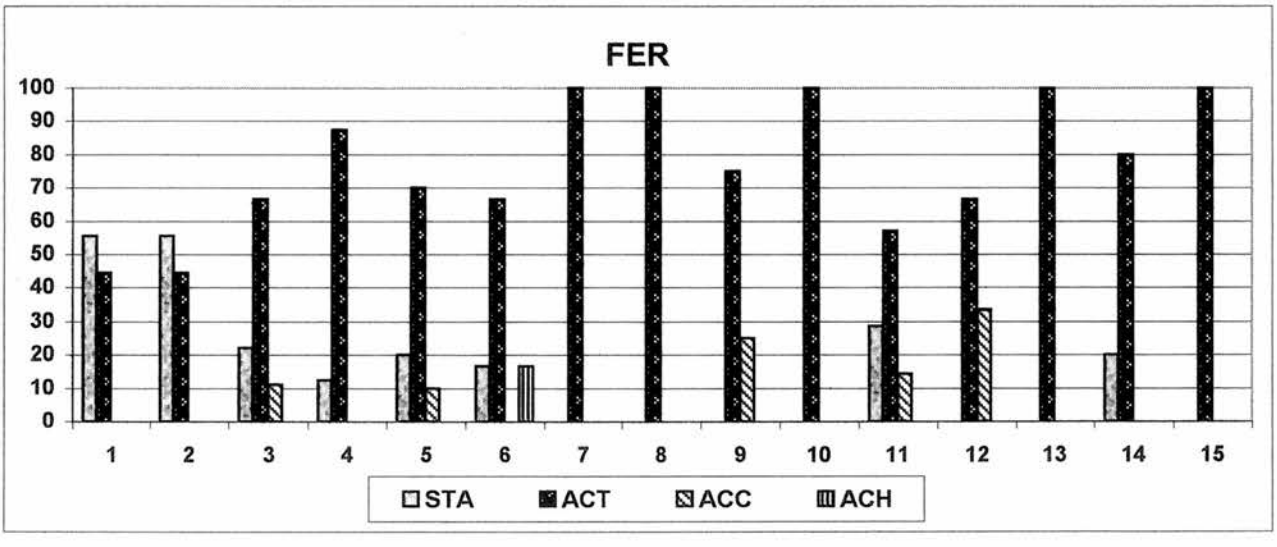
HEL

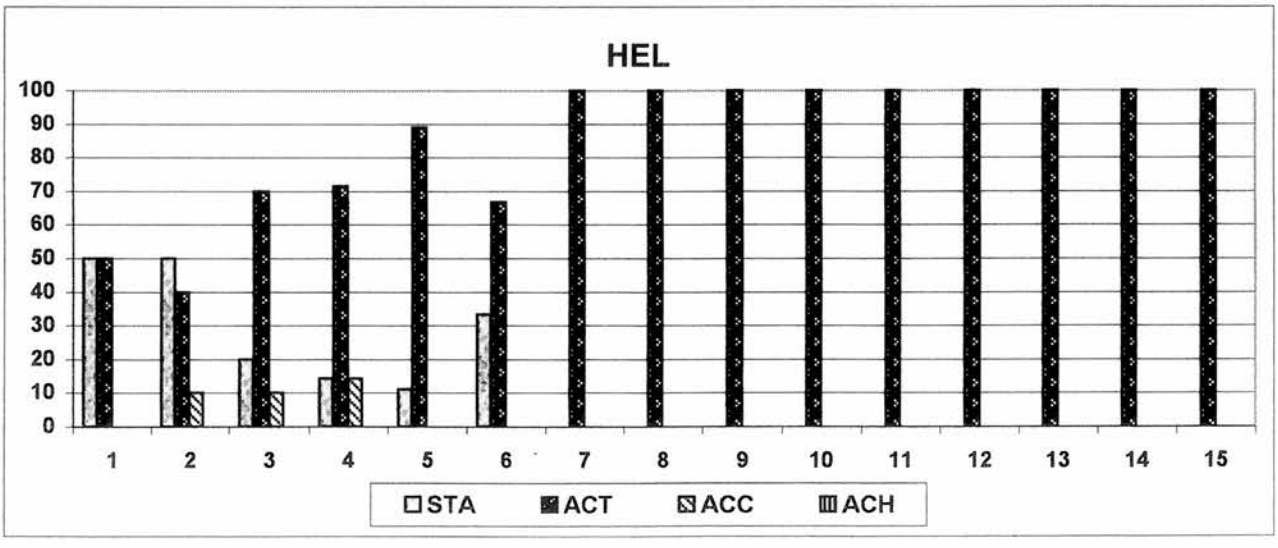
N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	4	5	2	1	1	2	0	0	0	0	0	0	0	0	0
ACT	4	4	7	5	8	4	6	4	4	4	4	1	2	3	1
ACC	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0
ACH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT	8	10	10	7	9	6	6	4	4	4	4	1	2	3	1

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STA	50	50	20	14.3	11.1	33.3	0	0	0	0	0	0	0	0	0
ACT	50	40	70	71.4	88.9	66.7	100	100	100	100	100	100	100	100	100
ACC	0	10	10	14.3	0	0	0	0	0	0	0	0	0	0	0
ACH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Figure 4.11: SPREAD OF IMPERFECT (%)







(4-110) a. INV: Freddie [beep] il camion.
'Freddie [beep] the lorry'.
LOU2-FER2-HEL2: guidava.
drive-IMPF-3sg
'was driving'.

b. INV: il fungo +...
'the mushroom ...'
LOU2-FER2-HEL2: ++ ballava.
dance-IMPF-3sg
'...was dancing'.

c. INV: c' erano molte feste a bordo
there be.IMPF.3pl a.lot.of parties on board
'there were a lot of parties on board'.
la gente [beep].
'the people [beep]'.
LOU14-FER14-HEL14: cantava
sing-IMPF-3sg
e ballava.
and dance-IMPF-3sg
'were singing and dancing'.

(4-111) a. INV: Rosie [beep] sopra il fieno.
'Rosie [beep] over the haycock'.
LOU6-FER6-HEL6: camminava.
walk-IMPF-3sg
'was walking'.

b. INV: poi Bambi +...
'then Bambi...'
LOU7-FER7: ++ camminava nella neve.
walk-IMPF-3sg in.the snow
'...was walking in the snow'.

(4-112) a. INV: le zebre +...
'the zebras...'
FER1-HEL1: ++ correva.
run-IMPF-3sg

'...s/he was running'.

b. INV: e il canguro?
'and the kangaroo?'
FER5-HEL5: saltava.
jump-IMPF-3sg
's/he was jumping'.

c. LOU7-FER7-HEL7: saltava
jump-IMPF-3sg
pattinava
skate-IMPF-3sg
e rideva.
and laugh-IMPF-3sg
'he was jumping, skating and laughing'.

d. INV: cosa ha fatto quest'uomo?
what have.IMPF-3sg do.PP this man
'what did this man do?'
LOU11: uh uh ballava
dance-IMPF-3sg
uh cantava
sing-IMPF-3sg
fatto i giochi
make.PP the games
uh raccontato le storie
tell-PP the stories
saltava
jump-IMPF-3sg
e correva.
and run-IMPF-3sg
'he was dancing, singing, he made games, he told stories, he was jumping and running'.

The *imperfetto* also appeared with bodily activities such as *dormire* ('sleep'- 4-113a,b&c), *sorridere* ('smile'- 4-113d&e), *ridere* ('laugh'- 4-114a&b), *piangere* ('cry'-4-114c&d).

(4-113) a. HEL11: io dormivo.
I sleep-IMPF-1sg

'I was sleeping'.

b. LOU13: ieri mia sorella ha
yesterday my sister have.PRES.3sg
un nuovo amica che vieni a mia casa
a new friend who come.PRES-2sg to my home
e dormiva mio casa.
and sleep-IMPF-3sg my home
'yesterday my sister had a new friend who came to my home and slept at my home'.

c. FER13: e quando ho andato a casa uh uh
and when have.PRES.1sg go-PP to home
all' appartamento ho andato a
at.the flat have.PRES.1sg go-PP to
letto e dormivo.
bed and sleep-IMPF-1sg
'and when I went home, to the flat, I went to bed and I was sleeping'.

d. INV: Jasper [beep].
LOU3-FER3-HEL3: sorrideva.
smile-IMPF-3sg
'was smiling'.

e. FER6-HEL6: l' asino sorrideva.
the donkey smile-IMPF-3sg
'the donkey was smiling'.

(4-114) a. INV: allora uh raccontami cosa è successo.
Well tell.me what be.PRES.3sg happen.PP
'well, tell me what happened'.
Babbo Natale +...
'Father Christmas...'
LOU5-FER5-HEL5: ++ rideva.
laugh-IMPF-3sg
'was laughing'.

b. INV: e i nani?
'and the dwarfs?'
LOU10: rimanevano stupiti
remain-IMPF-3sg surprised

'they remained surprised'
uh ridevano.
laugh-IMPF-3pl
'they were laughing'.

c. INV: e il soldato?
'and the soldier?'.
LOU12: sbattuto contro un albero
crash-PP against a tree
e piangeva.
and cry-IMPF-3sg
'he crashed into a tree and he was crying'.

d. FER12: il soldato sbattuto contro un albero
the soldier crash-PP against a tree
'the soldier crashed into a tree'.
uh piangeva.
cry-IMPF-3sg
'he was crying'.

Furthermore, the *imperfetto* encodes weather verbs such as *piovere* ('rain'- 4-115a), *nevicare* ('snow'- 4-115b), and the emission verb *splendere* ('shine'- 4-115c) which is also weather-related.

(4-115) a. INV: il tempo +..?
'the weather?'
FER3-HEL3: ++ pioveva.
rain-IMPF-3sg
'it was raining'.

b. INV: allora raccontami cosa hai visto nel
well tell.me what have.PRES.2sg see.PP in.the
video ## all' inizio +...
video at.the beginning
'well, tell me what you saw in the video: at the beginning...'
LOU4-FER4-HEL4: ++ nevicava.
snow-IMPF-3sg
'it was snowing'.

c. INV: quel giorno il sole [beep].

'that day the sun [beep]'.
LOU11-FER11: splendeva.
shine-IMPF-3sg
'was shining'.

The *imperfetto* is also associated with states, a link that is strongest in the first sessions especially in LOU. In this child, the occurrence of the *imperfetto* with statives is undulatory throughout the study; in FER it sensibly dropped after S6, and it is after S6 that HEL stopped marking states with the *imperfetto*. States marked by this tense generally indicate perception: *sembrare* ('look/seem'- 4-116), *parere* ('look/seem'- 4-117), *sentirsi/sentire* ('feel'- 4-118).

(4-116) a. INV: e il leone?
'and the lion?'
FER1-HEL1: sembrava contento.
look-IMPF-3sg happy
'he was looking happy'.

b. INV: e alla fine?
'and at the end?'
LOU13: sembrava come Adamo.
look-IMPF-3sg like Adam
'he was looking like Adam'.

(4-117) a. INV: com'era l' asino?
how be-IMPF-3sg the donkey
'how was the donkey?'
LOU6-FER6-HEL6: pareva molto felice.
look-IMPF-3sg very unhappy
'he was looking very unhappy'.

b. INV: Foxie [beep] molto infelice.
'Foxie [beep] very unhappy'.
LOU7-FER7-HEL7: pareva.
look-IMPF-3sg
'was looking'.

(4-118) a. INV: Wolfy [beep] eccitato.
'Wolfy [beep] excited'.
LOU2-FER2-HEL2: si sentiva.
REFL feel-IMPF-3sg
'was feeling'

b. INV: e Bambi?
'and Bambi?'
LOU3-FER3-HEL3: sentiva freddo.
feel-IMPF-3sg cold
'he was feeling cold'.

In LOU, the stative *volere* ('want'- 4-119) in the *imperfetto* is constantly present since S2 throughout the study.

(4-119) a. INV: l' albero brutto +...
the tree ugly
'the ugly tree...'
LOU2: ++ voleva l' albero bello.
want-IMPF-3sg the tree beautiful
'... wanted the beautiful tree'.

b. INV: e l'asino?
'and the donkey?'
LOU7: voleva mangiare il cappello.
want-IMPF-3sg eat-INF the hat
'he wanted to eat the hat'.

c. INV: all'inizio # il bambino +...
'at the beginning the boy...'.
LOU13: ++ voleva sparare a Bugs Bunny.
want-IMPF-3sg shoot at
'...wanted to shoot Bugs Bunny'.

d. LOU14: un marziano voleva prendere Bugs Bunny.
a Martian want-IMPF-3sg catch-INF
'a Martian wanted to catch Bugs Bunny'.

The spread of the *imperfetto* with accomplishments is very marginal and with achievements it is non-existent. In sum, the *imperfetto* is mainly restricted to activities,

especially in FER and HEL. As to its occurrence with states, in FER and HEL it is prominent only in the first two sessions, whereas in LOU, after the peak of the initial sessions, it is undulatory throughout the study.

4.2.2 Within-category analysis

This approach focuses on the morphological development within each of the four lexical aspectual classes. In addition to the three verb forms analyzed in 4.2.1, the infinitive and the present are also included (see table 4.11 for the number of tokens in the infinitive and present). The table below displays the number of tokens employed in this analysis.

Table 4.22: Number of L2 Italian tokens in the within-category analysis

	LOU	FER	HEL	TOTAL
STA	49	50	48	147
ACT	131	113	132	376
ACC	148	182	179	509
ACH	81	99	96	276
TOTAL	409	444	455	1308

Next, I will describe how each lexical aspectual class is marked developmentally.

4.2.2.1 States

The encoding of states is subject to individual variation. In LOU, states are predominantly encoded by the *imperfetto*. *Volere* ('want'- 4-120) is a state that she frequently marked with the *imperfetto* together with verbs of perception such as *sembrare* ('seem/look'- 4-121a), *parere* ('seem/look'- 4-121b), *sentire* ('feel'- 4-121c). Examples are also provided in 4.2.1.3.

Table 4.23: MARKING OF STATES

LOU

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pres	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0
Impf	2	5	2	1	1	3	3	1	0	3	3	4	4	3	2
PP	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0
CP	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1
TOT	4	5	2	1	3	4	3	1	0	5	3	6	5	4	3

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	50	0	0	0	0	0	0	0	####	0	0	0	0	0	0
Pres	0	0	0	0	66.7	25	0	0	####	0	0	0	0	0	0
Impf	50	100	100	100	33.3	75	100	100	####	60	100	66.7	80	75	66.7
PP	0	0	0	0	0	0	0	0	####	20	0	16.7	0	25	0
CP	0	0	0	0	0	0	0	0	####	20	0	16.7	20	0	33.3

FER

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pres	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
Impf	5	5	2	1	2	1	0	0	0	0	2	0	0	1	0
PP	0	0	0	0	0	2	3	1	1	2	0	2	0	1	1
CP	0	0	0	0	0	0	1	0	0	3	1	1	4	4	2
TOT	5	5	2	1	3	3	4	2	1	5	3	3	4	6	3

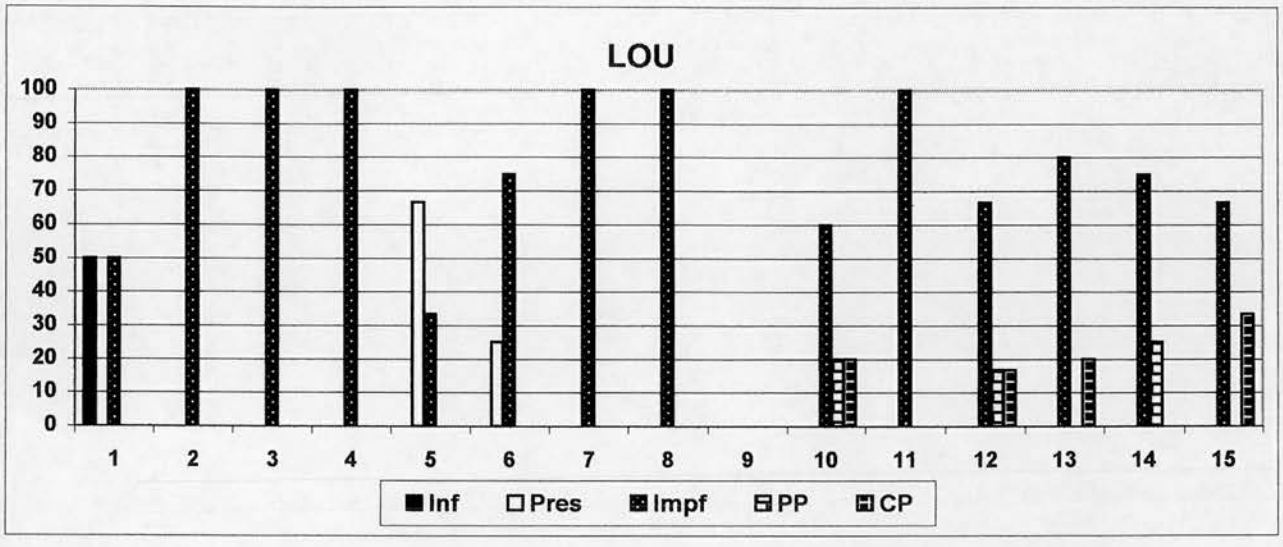
%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pres	0	0	0	0	33.3	0	0	50	0	0	0	0	0	0	0
Impf	100	100	100	100	66.7	33.3	0	0	0	0	66.7	0	0	16.7	0
PP	0	0	0	0	0	66.7	75	50	100	40	0	66.7	0	16.7	33.3
CP	0	0	0	0	0	0	25	0	0	60	33.3	33.3	100	66.7	66.7

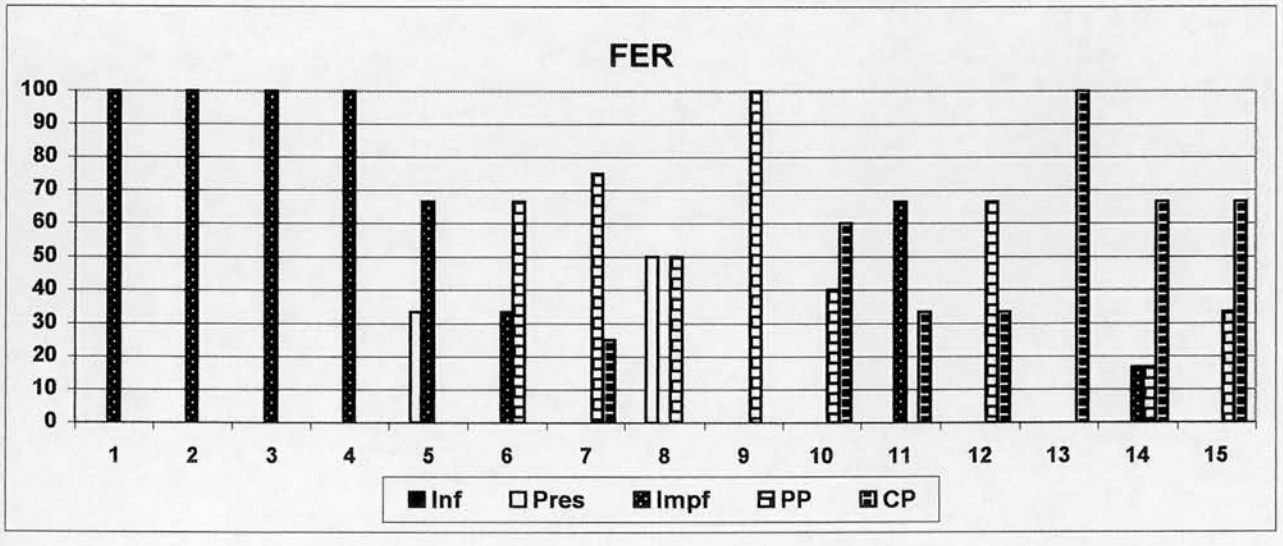
HEL

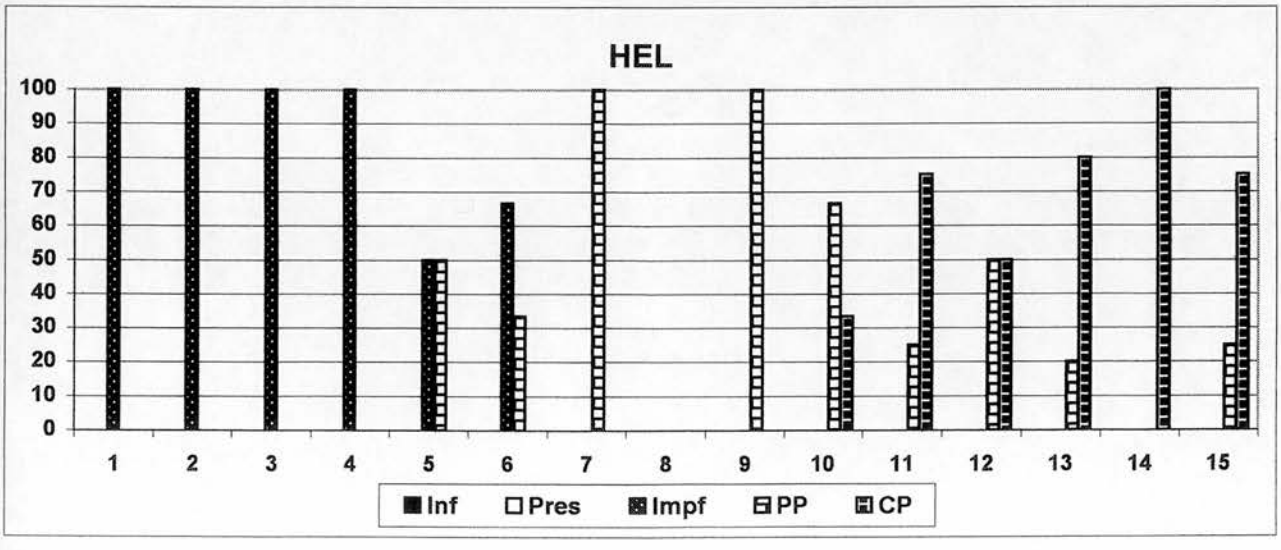
N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pres	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Impf	4	5	2	1	1	2	0	0	0	0	0	0	0	0	0
PP	0	0	0	0	1	1	3	0	1	2	1	2	1	0	1
CP	0	0	0	0	0	0	0	0	0	1	3	2	4	7	3
TOT	4	5	2	1	2	3	3	0	1	3	4	4	5	7	4

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	0	0	0	0	0	0	0	####	0	0	0	0	0	0	0
Pres	0	0	0	0	0	0	0	####	0	0	0	0	0	0	0
Impf	100	100	100	100	50	66.7	0	####	0	0	0	0	0	0	0
PP	0	0	0	0	50	33.3	100	####	100	66.7	25	50	20	0	25
CP	0	0	0	0	0	0	0	####	0	33.3	75	50	80	100	75

Figure 4.12: MARKING OF STATES (%)







(4-120) a. INV: e Bugs Bunny?
'and Bugs Bunny?'
LOU11: voleva prendere il diavoletto.
want-IMPF-3sg catch-INF the little.devil
'he wanted to catch the little devil'.

b. LOU12: il soldato voleva arrestare Bugs Bunny.
the soldier want-IMPF-3sg arrest-INF
'the soldier wanted to arrest Bugs Bunny'.

c. INV: le tre capre avevano molta paura dell'
the three goats have-IMPF-3pl a.lot.of fear of.the
orco.
ogre
'the three goats were very frightened by the ogre'.
tuttavia loro [beep] quell'erba verde e buona.
however they that grass green and good
'however they [beep] that good green grass'.
LOU15: voleva.
want-IMPF-3sg
'wanted'.

(4-121) a. INV: e il leone?
'and the lion?'
LOU1: sembrava felice.
look-IMPF-3sg happy
'he was looking happy'.

b. INV: la sua mamma [beep] sorpresa.
the his mum surprised
'his mum [beep] surprised'.
LOU2: pareva.
look-IMPF-3sg
'was looking'.

c. INV: Piggy [beep] caldo.
'Piggy [beep] hot'.
LOU11: sentiva.
feel-IMPF-3sg
'was feeling'.

Other states in the *imperfetto* include *appartenere* ('belong'- 4-122a), *vivere* ('live'- 4-122b), *conoscere* ('know'- 4-122c).

(4-122) a. INV: la scatola [beep] a Freddy.
'the box [beep] to Freddy'.
LOU1: apparteneva.
belong-IMPF-3sg
'belonged'.

b. INV: c' era una volta Piggy
there be.IMPF.3sg one time
Piggy [beep] in campagna.
in countryside
'Once upon a time Piggy [beep] in the countryside'.
LOU11: viveva.
live-IMPF-3sg
'lived/was living'.

c. INV: Neil [beep] con Piggy +...
'Neil [beep] with Piggy...'
LOU13: ha parlato.
have.PRES.3sg talk-PP
'talked'
INV: +, perchè lui [beep] Piggy.
'...because he [beep] Piggy'.
LOU13: conosceva.
know-IMPF-3sg
'knew'.

In FER and HEL, states are almost exclusively linked to the *imperfetto* until S5-S6. These consist of verbs indicating perception (4-123 – see 4.1.2.3 for further examples), possession (4-124) and desire (4-125).

(4-123) a. INV: e il leoncino?
'and the little lion?'
FER1-HEL1: pareva spaventato.
look-IMPF-3sg scared
'he was looking scared'.

b. INV: Jasper [beep] molto scocciato.
'Jasper [beep] very annoyed'.
FER4-HEL4: sembrava.
look-IMPF-3sg
'was looking'

(4-124) a. INV: la scatola [beep] a Freddy.
'the box [beep] to Freddy'.
FER1-HEL1: apparteneva.
belong-IMPF-3sg
'belonged'.

(4-125) a. INV: l' albero brutto +...
the tree ugly
'the ugly tree...'
FER2-HEL2: ++ voleva l' albero bello.
want-IMPF-3sg the tree beautiful
'...wanted the beautiful tree'.

b. FER5: sabato ho montato Peanuts
Saturday have.PRES.1sg ride-PP
e non è bravo
and NEG be.PRES.3sg good
perchè voleva galoppare.
because want-IMPF-3sg gallop-INF
'last Saturday I rode Peanuts and he is no good
because he wanted to gallop'.

c. INV: e poi uh l'asino +..?
'and then the donkey...?'
HEL6: ++ mangiato il fiore
eat-PP the flower
e voleva mangiare il cappello.
and want-IMPF-3sg eat-INF the hat
'...ate the flower and wanted to eat the hat'.

From S5-S6, FER and HEL produced states in the past participle and from S10-S11, they consistently encoded them in the compound past. States that occurred with the past, i.e. bare past participle or compound past, indicate the background of situations, which would

normally be expressed by the *imperfetto*. Interestingly, past forms marked verbs of desire (4-126a,b&c), possession (4-126d) and perception (4-126e), three types of states that previously appeared in the *imperfetto* (4-123, 4-124, 4-125).

(4-126) a. HEL13: mia piccola sorella gridava
my little sister scream-IMPF-3sg
perché lei voluto uno yogurt a cioccolato.
because she want-PP a yoghurt at chocolate
'My little sister was screaming because she wanted a chocolate yoghurt'.

b. INV: le tre capre avevano molta paura dell'
the three goats have-IMPF-3pl a.lot.of fear of.the
orco.
ogre
'the three goats were very frightened by the ogre'.
tuttavia loro [beep] quell'erba verde e buona.
however they that grass green and good
'however they [beep] that good green grass'.

FER15: ha voluto.
have.PRES.3sg want-PP
'wanted'

c. HEL15: hanno voluto.
have.PRES.3pl want-PP
'wanted'

d. INV: il Titanic [beep] a Canard Lines.
'the Titanic [beep] to Canard Lines'.
FER14-HEL14: ha appartenuto.
have.PRES.3sg belong-PP
'belonged'.

e. INV: era la nave dei sogni
be.PRES-3sg the ship of.the dreams
'it was the ship of dreams'.
tutti [beep] contenti.
'everybody [beep] happy'.
FER14-HEL14: sono paruti.
be.PRES.3pl look-PP-Mpl

'looked'.

Similarly, states such as *vivere* ('live'- 4-127) and *conoscere* ('know'- 4-128) occurring in the background received perfective marking instead of the imperfective one, which would be the preferred choice in the target.

(4-127) a. INV: c' era una volta Piggy
there be.IMPF.3sg one time
Piggy [beep] in campagna.
in countryside
'once upon a time Piggy [beep] in the countryside'.

HEL11: ha vivuto.
have.PRES.3sg live-PP
'lived'

b. HEL12: un giorno io andata alla casa del mio
one day I go-PP-Fsg to.the house of.the my
nonna per uh come si dice
grandma for how IMPRS say.PRES-3sg
summer+holidays@l1?
'one day I went to my grandma's house for...how do you say summer holidays?'.

INV: vacanze estive.

HEL12: vivuto dentro uno bellissima casa.
live-PP inside a very.beautiful house
'I lived inside a very beautiful house'.

c. INV: sul fiume c' era un ponte di legno
on.the river there was a bridge of wood
sotto questo ponte [beep] un orco brutto e cattivo.
under this bridge a ogre ugly and evil
'over the river there was a wooden bridge, under this bridge [beep] an evil ugly ogre'.

FER15: ha vivuto.
have.PRES.3sg live-PP
'lived'.

d. HEL15: ha vissuto.
have.3sgPRES live.PP
'lived'.

(4-128) a. INV: Neil [beep] con Piggy +...
'Neil [beep] with Piggy...'
FER13-HEL13: ha parlato.
have.PRES.3sg talk-PP
'talked'.
INV: +, perchè Neil [beep] Piggy
'...because Neil [beep] Piggy'.
FER13-HEL13: ha conosciuto.
have.PRES.3sg know-PP
'knew'.

To sum up, states are generally encoded by the *imperfetto* in LOU throughout the study, and in FER and HEL up to S5-S6. Afterwards, in these two children, the *imperfetto* is underproduced with statives, resulting in the bare past participle and compound past becoming the default forms for statives. The past participle generally occurred in controlled tasks whereas the compound past occurred in both spontaneous production and controlled tasks.

4.2.2.2 *Activities*

As for states, the marking of activities is subject to individual variation. Activities are principally encoded by the *imperfetto* up to S8-S9 in FER and HEL. Activities in the *imperfetto*, predominantly distributed in controlled tasks, consist of motional verbs (*volare* 'fly', *guidare* 'drive', *ballare* 'dance', *camminare* 'walk', *saltare* 'jump', *correre* 'run', *pattinare* 'skate'), bodily activities (*dormire* 'sleep', *sorridere* 'smile', *ridere* 'laugh', *piangere* 'cry') and weather-related predicates (*nevicare* 'snow', *piovere* 'rain', *splendere* 'shine'). Examples are provided in 4.2.1.3. In LOU, the link activities-*imperfetto* is prominent from S5 to S12: up to S6, the *imperfetto* competes with the present tense and, from S12 , with the compound past. The present tense on activities occurs primarily in spontaneous production and virtually disappears after S6[4].

Table 4.24: MARKING OF ACTIVITIES

LOU

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	3	0	0	1	0	0	0	1	0	0	0	0	0	0	0
Pres	5	4	6	7	3	4	0	0	0	0	0	1	0	0	0
Impf	0	2	4	2	8	4	7	5	6	7	10	4	4	4	3
PP	0	0	0	0	0	0	1	2	0	1	0	0	0	0	1
CP	0	0	0	0	0	0	0	0	4	1	1	4	4	5	2
TOT	8	6	10	10	11	8	8	8	10	9	11	9	8	9	6

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	37.5	0	0	10	0	0	0	12.5	0	0	0	0	0	0	0
Pres	62.5	66.7	60	70	27.3	50	0	0	0	0	0	11.1	0	0	0
Impf	0	33.3	40	20	72.7	50	87.5	62.5	60	77.8	90.9	44.4	50	44.4	50
PP	0	0	0	0	0	0	12.5	25	0	11.1	0	0	0	0	16.7
CP	0	0	0	0	0	0	0	0	40	11.1	9.09	44.4	50	55.6	33.3

FER

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pres	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Impf	4	4	6	7	7	4	6	4	3	4	4	2	2	4	1
PP	1	2	1	1	2	1	0	0	1	1	0	1	2	1	0
CP	0	1	2	2	1	2	0	2	5	3	3	6	4	3	3
TOT	5	7	9	10	10	7	6	6	9	8	7	9	8	8	4

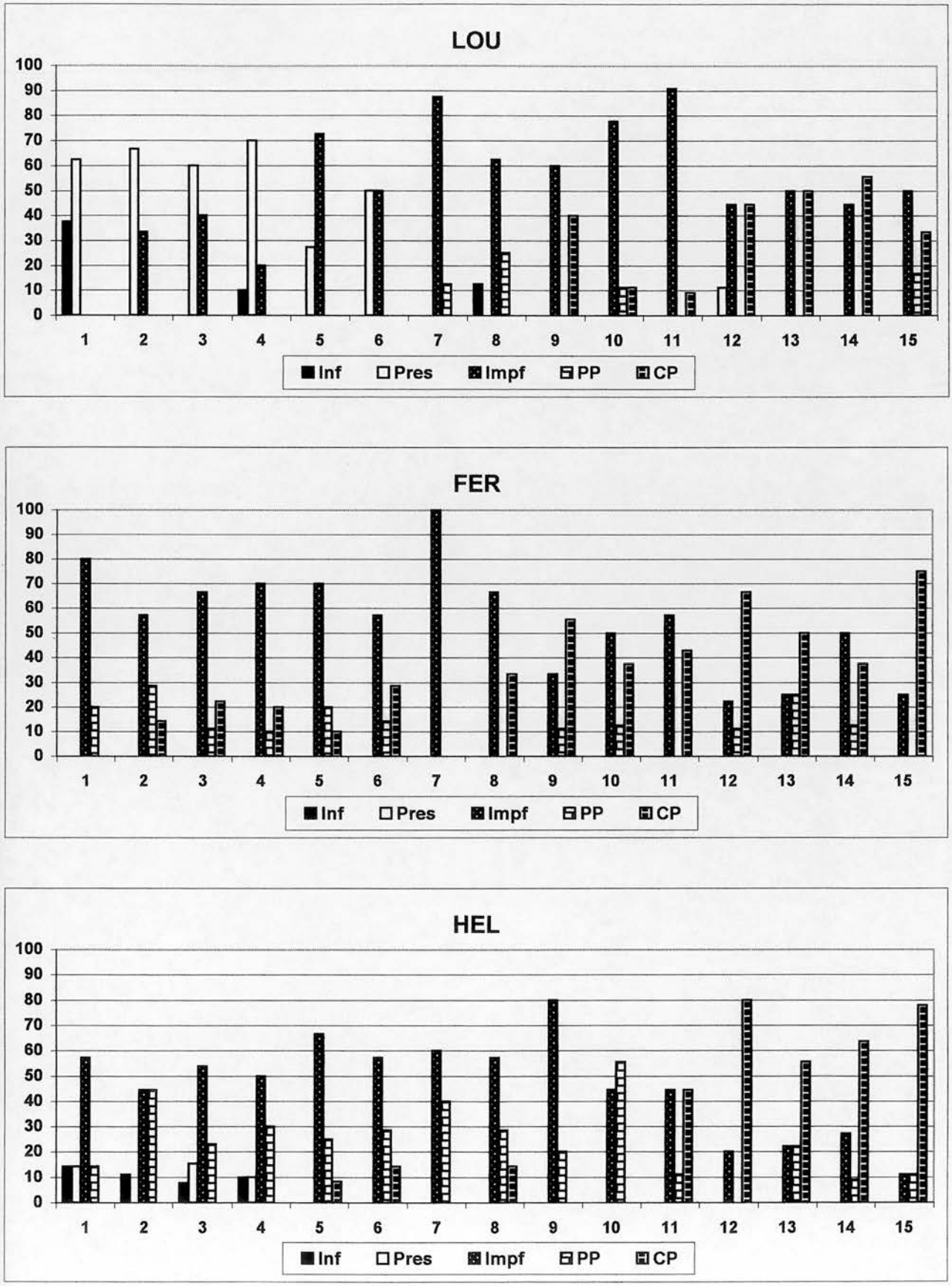
%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pres	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Impf	80	57.1	66.7	70	70	57.1	100	66.7	33.3	50	57.1	22.2	25	50	25
PP	20	28.6	11.1	10	20	14.3	0	0	11.1	12.5	0	11.1	25	12.5	0
CP	0	14.3	22.2	20	10	28.6	0	33.3	55.6	37.5	42.9	66.7	50	37.5	75

HEL

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Pres	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0
Impf	4	4	7	5	8	4	6	4	4	4	4	1	2	3	1
PP	1	4	3	3	3	2	4	2	1	5	1	0	2	1	1
CP	0	0	0	0	1	1	0	1	0	0	4	4	5	7	7
TOT	7	9	13	10	12	7	10	7	5	9	9	5	9	11	9

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	14.3	11.1	7.69	10	0	0	0	0	0	0	0	0	0	0	0
Pres	14.3	0	15.4	10	0	0	0	0	0	0	0	0	0	0	0
Impf	57.1	44.4	53.8	50	66.7	57.1	60	57.1	80	44.4	44.4	20	22.2	27.3	11.1
PP	14.3	44.4	23.1	30	25	28.6	40	28.6	20	55.6	11.1	0	22.2	9.09	11.1
CP	0	0	0	0	8.33	14.3	0	14.3	0	0	44.4	80	55.6	63.6	77.8

Figure 4.13: MARKING OF ACTIVITIES (%)



(4-129) a. LOU1: dopo fa matematica.
then do.PRES.3sg mathematics
'then I did maths'.

b. LOU2: dopo aspetta con la campana.
then wait-PRES-3sg with the bell
'after I waited for the bell'.

c. LOU3: la campanella fa dingdong@o.
the bell do.PRES.3sg
'the bell goes ding dong'.

d. LOU4: lunedì io gioca con mia nonna.
Monday I play-PRES-3sg with my grandma
'on Monday I played with my grandma'.

e. LOU4: e dopo dormo.
and then sleep-PRES-1sg
'and then I slept'.

f. LOU5: la nonna guarda la televisione con me
the grandma watch-PRES-3sg the television with me
e mia sorella.
and my sister
'My grandma watched television with me and my sister'.

g. LOU5: la nonna aiuta mio mamma.
the grandma help-PRES-3sg my mum
'my grandma helped my mum'.

h. LOU6: io aspetto mio papà.
I wait-PRES-1sg my dad
'I waited for my dad'.

When the compound past appears with activities, the aspectual opposition *imperfetto/passato prossimo* also appears. As exemplified below, activities in the *imperfetto* provide background information: *batteva* (4-130a) expresses progressive aspect; *mi spingevano*, *mi chiamavano* (4-130b) express habitual aspect. As argued in 1.1.2, progressive aspect and habitual aspect can be considered as forms of continuous aspect. Conversely, the *passato prossimo* functions as an aorist past. Activities such as *ha chiamato la gatto* (4-130a); *ha fatto cattivi*, *ha fatto boccacce* (4-130b) are foregrounded and perceived as punctual and complete.

(4-130) a. LOU9: mio sorella e io ha chiamato la gatto
my sister and I have.PRES.3sg call-PP the cat
'my sister and I called the cat'
uh dopo il gatto arrivato
then the cat arrive-PP
'then the cat arrived'
il cuore di gatto batteva molto forte.
the heart of cat beat-IMPF-3sg very fast
'the heart of the cat was beating very fast'.

b. LOU12: oggi # sul pullmann uh due bambini
today on.the bus two boys
ha fatto cattivi con me
have.PRES.3sg do.PP bad with me
'today on the bus two boys were bad to me'.
uno ha fatto boccacce.
one have.PRES.3sg make.PP faces
'one of them made faces'.

INV: perché?
'why?'

LOU12: perché loro amano me
because they love-PRES-3pl me
'because they love me'
prima che io sapevo
before that I know-IMPF-1sg
che mi amavano
that ACC love-IMPF-3pl
mi spingevano
ACC push-IMPF-3pl
e mi chiamavano puppy@l1.
and ACC call-IMPF-3pl
'before I knew that they loved me, they pushed me and they called me puppy'.

Similarly, in FER and HEL, the aspectual opposition between the *passato prossimo* and the *imperfetto* emerges in the second half of the study, when activities in the compound past rose. This expansion concides with the spread of the compound past to activities in the controlled tasks, which started in S9 for FER and in S11 for HEL.

(4-131) a. HEL11: nella notte mio papà ha venuto
in.the night my dad have.PRES.3sg come.PP
con mio nonno e nonna
with my grandpa and grandma
io dormivo.
I sleep-IMPF-1sg
'in the night, my dad came with my grandpa and grandma; I was sleeping'.

b. HEL11: io ho detto no.
I have.PRES.1sg say.PP no
'I said no'.

(4-132) a. FER12: ho galoppato senza staffe e
have.PRES.1sg gallop-PP without stirrups and
senza redini.
without reins
'I galloped without stirrups and without reins'.

b. FER12: piangeva
cry-IMPF-3sg
e Bugs Bunny si sentito dispiaciuto.
and REFL feel-PP sorry
'he was crying and Bugs Bunny felt sorry'.

(4-133) a. FER13: il bambino correva dietro.a Bugs Bunny
the boy run-IMPF-3sg after
ma il bambino ha trovato un orso
but the boy have.PRES.3sg find-PP a bear
e spaventato.
and scare-PP
'the boy was running after Bugs Bunny but the boy found a bear and got scared'.

b. FER13: Bugs Bunny ha giocato a dadi con
have.PRES.1sg play-PP at dice with
il bambino e il bambino perso tutto.
the boy and the boy lose.PP everything

'Bugs Bunny played dice with the boy and the boy lost everything'.

(4-134) a. HEL14: il marziano ha annaffiato
the Martian have.PRES.3sg water-PP
i semi magici
the seeds magic
'the Martian watered the magic seeds'.

b. HEL14: i mostri rincorreva Bugs Bunny
the monsters run.after-IMPF-3sg
ma Bugs Bunny ha scappato
but have.PRES.3sg escape-PP
su un disco volante.
on a saucer flying
'the monsters were running after Bugs Bunny but Bugs Bunny escaped on a flying saucer'.

As exemplified above, activities in the *imperfetto* (*dormivo* – 4-131a, *piangeva* – 4-132b, *correva* – 4-133a, *rincorreva* – 4-134b) express continuous/progressive aspect and set the scene in the background of narratives. Conversely, activities in the compound past (*ho detto* – 4-131b, *ho galoppato* – 4-135a, *ha giocato* – 4-136b, *ha annaffiato* – 4-137a) express the foreground and are viewed perfectively. Perfective aspect is deeply linked to the past tense (see 1.1.1ff). In these child L2 Italian data, the compound past often represents a 'default past tense', as discussed earlier in this chapter (see also 2.2.2.2).

In FER and HEL, the marking of activities is shared between the *imperfetto*, the bare past participle and the compound past. Up to S8, these two children use the *imperfetto* for activities in controlled tasks. In spontaneous production, FER alternates between the bare past participle and the compound past throughout the study whereas in HEL, up to S10, activities in the bare past participle outnumber those in the compound past.

(4-135) a. HEL2: guardato la televisione.
watch-PP the television
'I watched television'.

b. HEL4: io fatto un po' di colorato.
I do.PP a bit of colourings
'I did a bit of colourings'.

c. HEL6: io giocato con mio cousin@l1.
I play-PP with my
'I played with my cousin'.

d. HEL7: io spingiuto mia scatola.
I push-PP my box
'I pushed my box'.

e. HEL9: la strega parlato a Biancaneve.
the witch talk-PP to Snow.White
'the witch talked to Snow White'.

f. HEL10: mio cane nuotato dentro l' acqua.
my dog swim-PP into the water
'my doge swam into the water'.

The bare past participle with activities can also indicate posteriority when it is preceded by the compound past. Therefore, the compound past with activities indicates pastness (4-137b, 4-138b, 4-139b) or anteriority (4-136b). As highlighted below, the same activity can be marked by either the bare past participle or the compound past.

(4-136) a. FER2: ho andato a scuola
have.PRES.1sg go-PP to school
e **fatto** inglese.
and do.PP English
'I went to school and did English'.

b. FER3: a scuola **ho** **fatto** matematica
at school have.PRES.1sg do.PP mathematics
e dopo matematica uh **fatto** inglese.
and after mathematics do.PP English
'at school I did maths and after maths I did English'.

(4-137) a. FER4: ho andato a casa
have.PRES.1sg go-PP to home
e **mangiato** caroti e pollo.

and eat-PP carrots and chicken
'I went home and ate carrots and chicken'.

b. FER2: **ho** **mangiato.**
have.PRES.1sg eat-PP
'I ate'.

(4-138) a. FER5: quando ho andato sulla pista
when have.PRES.1sg go-PP on.the racecourse
uh **galoppato.**
gallop-PP
'when I went on the racecourse I galloped'.

b. FER10: su Margherita **ho** **galoppato.**
on have.PRES.1sg gallop-PP
'on Margherita I galloped'.

(4-139) a. FER9: ho tolto il mio sci
have.PRES.1sg take.off.PP the my ski
e **aiutato** A.
and help-PP
'I took off my ski and helped A.'

b. FER9: un ragazzo **ha** **aiutato** il mia sorella.
a boy have.PRES.3sg help-PP the my sister
'a boy helped my sister'.

Although more prominent in FER, the pattern compound past-bare past participle is also recurrent in HEL, as illustrated below:

(4-140) a. HEL8: io ho andato su tutti li giochi
I have.PRES.1sg go-PP on all the games
e andato a casa
and go-PP to home
e **giocato** con mia piccola amica.
and play-PP with my little friend
'I went on all the games and went home and played with my little friend'.

b. HEL8: **ho** **giocato** a bambola

have.PRES.1sg play-PP at doll
e andata in giardino
and go-PP-Fsg in garden
e **mangiato** un.po'.di biscotti.
and eat-PP some biscuits
'I played with a doll and went into the garden and ate some biscuits'.

(4-141) a. HEL11: la mattina mio fratello ha entrato
the morning my brother have.PRES.3sg enter-PP
in mia camera e **detto** +
in my bedroom and say.PP
"tu vuoi venire giù? +".
you want come.INF down
'in the morning my brother came into my bedroom and said "do you want to come downstairs?"'.
io **ho** **detto** no.
I have.PRES.1sg say.PP no
'I said no'.

(4-142) a. HEL5: ho andato alla casa
have.PRES.1sg go-PP at.the house
e **mangiato** un po' di sandwich
and eat-PP a bit of sandwich
e tu arrivato.
and you arrive-PP
'I went home and ate a bit of sandwich and you arrived'.

b. HEL 15: io **ho** **mangiato** poco poco
I have.PRES.1sg eat-PP little little
e andato a guardar televisione.
and go-PP to watch-INF television
'I ate little little and went to watch television'.

To sum up, the marking of activities is generally shared between the *imperfetto*, the bare past participle and the compound past. Activities are principally encoded by the

imperfetto up to S8-S9 in FER and HEL, and from S5 to S11 in LOU. Up to S6, the *imperfetto* competes with the present tense in LOU. The occurrence of these verb forms with activities vary according to the task, the learner, the aspectual viewpoint chosen by the learner, and the time point of the observation.

4.2.2.3 *Accomplishments*

Accomplishments are primarily encoded by the bare past participle and the compound past. The distribution of these verb forms is subject to individual, developmental and task variation. In fact, FER started to mark accomplishments with the compound past from S1, HEL started to do that from S5 and LOU from S8. However, it is only from S9 that FER and HEL use the compound past with accomplishments in controlled tasks; before that, the bare past participle is preferred with accomplishments in controlled tasks. Accomplishments generally consist of motional predicates with a directional complement, i.e. *andare* ('go'), which is highly frequent, *venire* ('come'), *(ri)tornare* ('come back'), *correre* ('run'), *saltare* ('jump'), *volare* ('fly'). Frequent accomplishments include consumption/creation predicates, i.e. *mangiare* ('eat'), *fare* ('do/make'), followed by a defined object. Other accomplishments are represented by causative-ditransitive predicates such as *mettere* ('put'), *portare* ('take'), *mostrare* ('show').

Accomplishments in the bare past participle are predominant in LOU from S4 to S12 and in HEL up to S10. Examples of accomplishments in the bare past participle are supplied in 4.2.1.1. From S13 in LOU, S9 in FER and S12 in HEL, the compound past took over from the bare past participle in the marking of accomplishments. The compound past produced by the children consists of the past participle generally preceded by the auxiliary *avere*, which carries tense-marking. *Avere* represents the default auxiliary, notwithstanding the fact that in the target, intransitive accomplishments, which belong to the family of unaccusatives, select *essere* as auxiliary (see 1.3.1.1). Only few intransitive accomplishments appeared in the compound past with *essere*. These are listed in 4.2.1.2.

Table 4.25: MARKING OF ACCOMPLISHMENTS

LOU

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	2	0	0	1	0	1	0	1	0	0	0	0	0	0	0
Pres	6	4	5	2	0	1	0	0	0	0	0	0	1	0	0
Impf	0	0	1	2	0	0	0	0	0	0	0	0	2	0	0
PP	2	7	5	5	8	10	10	8	8	5	3	8	3	3	6
CP	0	0	0	0	0	0	0	1	3	2	2	3	4	6	7
TOT	10	11	11	10	8	12	10	10	11	7	5	11	10	9	13

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	20	0	0	10	0	8.33	0	10	0	0	0	0	0	0	0
Pres	60	36.4	45.5	20	0	8.33	0	0	0	0	0	0	10	0	0
Impf	0	0	9.09	20	0	0	0	0	0	0	0	0	20	0	0
PP	20	63.6	45.5	50	100	83.3	100	80	72.7	71.4	60	72.7	30	33.3	46.2
CP	0	0	0	0	0	0	0	10	27.3	28.6	40	27.3	40	66.7	53.8

FER

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0
Pres	2	2	0	2	0	1	0	0	0	0	0	0	0	0	0
Impf	0	0	1	0	1	0	0	0	1	0	1	1	0	0	0
PP	5	6	7	8	6	7	6	8	4	3	2	5	4	3	5
CP	4	3	4	5	4	4	6	6	6	9	5	9	9	5	9
TOT	12	12	12	16	11	12	12	14	11	12	8	15	13	8	14

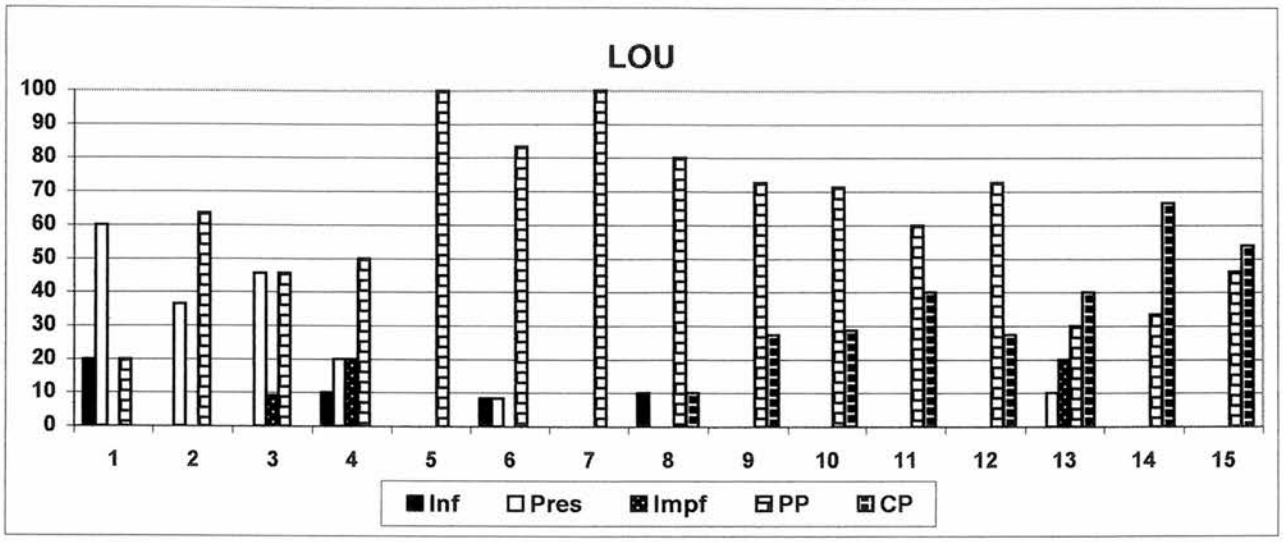
%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	8.33	8.33	0	6.25	0	0	0	0	0	0	0	0	0	0	0
Pres	16.7	16.7	0	12.5	0	8.33	0	0	0	0	0	0	0	0	0
Impf	0	0	8.33	0	9.09	0	0	0	9.09	0	12.5	6.67	0	0	0
PP	41.7	50	58.3	50	54.5	58.3	50	57.1	36.4	25	25	33.3	30.8	37.5	35.7
CP	33.3	25	33.3	31.3	36.4	33.3	50	42.9	54.5	75	62.5	60	69.2	62.5	64.3

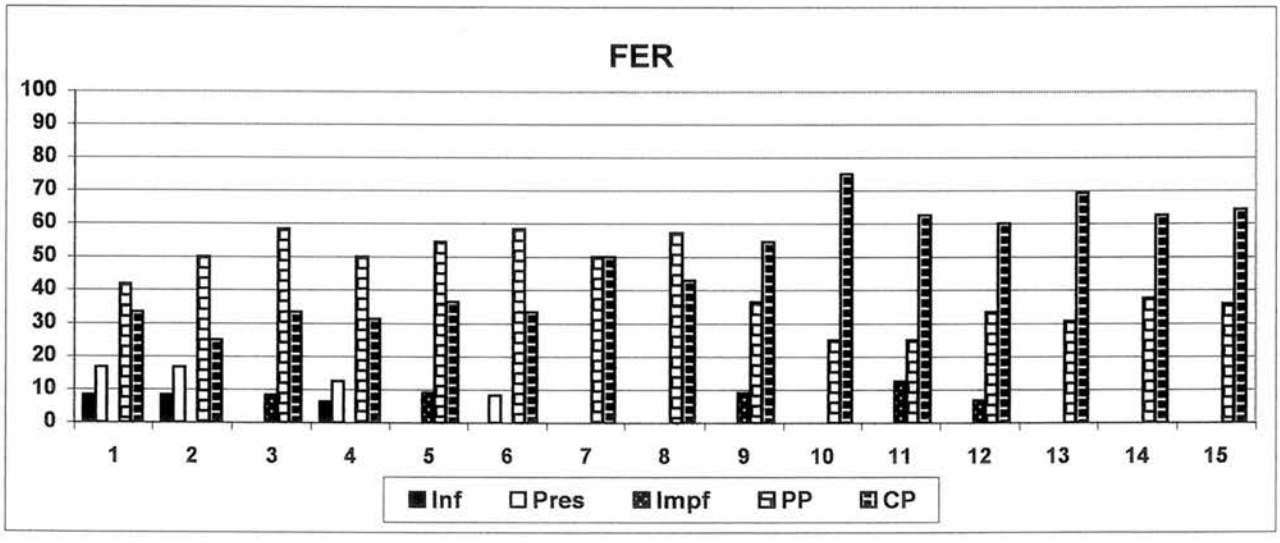
HEL

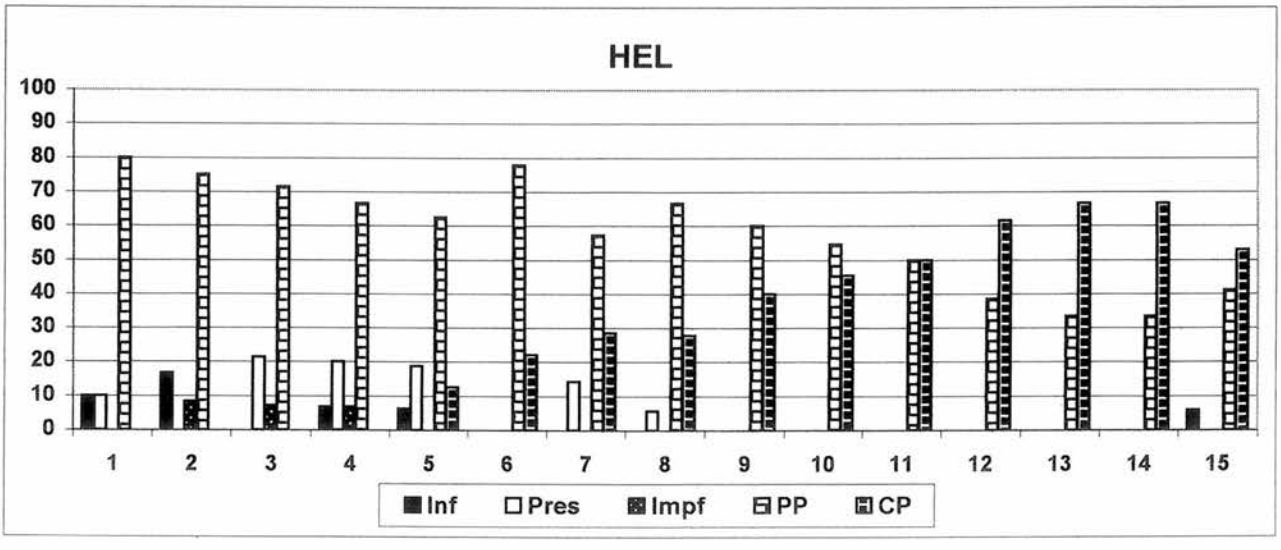
N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	1	2	0	1	1	0	0	0	0	0	0	0	0	0	1
Pres	1	0	3	3	3	0	1	1	0	0	0	0	0	0	0
Impf	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0
PP	8	9	10	10	10	7	4	12	6	6	3	5	3	4	7
CP	0	0	0	0	2	2	2	5	4	5	3	8	6	8	9
TOT	10	12	14	15	16	9	7	18	10	11	6	13	9	12	17

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	10	16.7	0	6.67	6.25	0	0	0	0	0	0	0	0	0	5.88
Pres	10	0	21.4	20	18.8	0	14.3	5.56	0	0	0	0	0	0	0
Impf	0	8.33	7.14	6.67	0	0	0	0	0	0	0	0	0	0	0
PP	80	75	71.4	66.7	62.5	77.8	57.1	66.7	60	54.5	50	38.5	33.3	33.3	41.2
CP	0	0	0	0	12.5	22.2	28.6	27.8	40	45.5	50	61.5	66.7	66.7	52.9

Figure 4.14: MARKING OF ACCOMPLISHMENTS (%)







As already mentioned in this chapter, the compound past expresses past-time reference and therefore acts as a past tense. The following examples illustrate accomplishments in the compound past.

(4-143) a. LOU9: io ho venuto a casa del scuola.
I have.PRES.1sg come.PP to home of.the school
'I came home from school'.

b. LOU9: ha fatto la torta.
have.PRES.3sg make.PP the cake
'she made a cake'.

c. LOU11: ha volato a città.
have.PRES.3sg fly-PP to town
'he flew to the town'.

d. LOU11: ha mostrato una figura al
have.PRES.3sg show-PP a picture to.the
diavoletto.
little.devil
'he showed a picture to the little devil'.

e. LOU13: ho andato a negozi
have.PRES.3sg go-PP to shops
e comprato tanti caramelle
and buy.PP a.lot.of sweets
e mangiato tutto le caramelle.
and eat-PP all the sweets
'I went to shops and bought a lot of sweets and ate all the sweets'.

f. LOU14: una notte un uomo ha portato Henry
one night a man have.PRES.3sg take-PP
alla stalla.
to.the stable
'one night a man took Henry to the stable'.

(4-144) a. FER1: ho mangiato un gelato.
have.PRES.1sg eat-PP a ice.cream
'I ate an ice-cream'.

b. FER3: dopo ho venuto qua.
then have.PRES.1sg come.PP here

'then I came here'.

c. FER6: ho andato a Esselunga.
have.PRES.1sg go-PP to
'I went to Esselunga'.

d. FER10: dopo lei ha messo Tamburina nella
then she have.PRES.3sg put.PP in.the
stalla.
stable
'then she put Tamburina in the stable'.

e. FER14: Bugs Bunny ha volato su Marte con
have.PRES.3sg fly-PP on Mars with
un'astronave
a spaceship
'Bugs Bunny flied to Mars on a spaceship'.

f. FER14: ho fatto un gioco.
have.PRES.1sg make.PP a game
'I made a game'.

(4-145) a. HEL5: io ho andato sul pullman.
I have.PRES.1sg go-PP on.the bus
'I went on the bus'.

b. HEL6: ho mangiato uno uh come si dice
have.PRES.1sg eat-PP a how IMPRS say.PRES-3sg
turkey@l1?
'I ate a...how do you say turkey?'

c. HEL8: R. uh il papà di L. # ha portato me
the dad of have.PRES.3sg take-PP me
a mio nuovo casa.
to my new home
'R., L.'s dad, took me to my new home'.

d. INV: ieri pomeriggio Paddington [beep] la spesa.
'yesterday afternoon Paddington [beep] the shopping'.
HEL9: ha fatto.
have.PRES.3sg do.PP
'did'.

e. INV: tutti gli animali [beep] da Neil.
'all the animals [beep] to Neil'.

HEL11: hanno corruto.
have.PRES.3pl run-PP
'ran'.

f. HEL14: ha ritornato sulla Terra.
have.PRES.3sg come.back-PP on.the Earth
'he came back to the Earth'.

The compound past also acts as marker of anteriority, when it appears before a bare past participle. The compound past and the bare past participle are often arranged in a sequence expressing the relationship antecedent-subsequent. This narrative structure, which has already been presented in this chapter, is particularly frequent in the spontaneous speech of FER and HEL. The examples below highlight accomplishments appearing in the sequence compound past-bare past participle.

(4-146) a. FER1: **ho** **andato** a una festa di cavalli piccoli
have.PRES.1sg go-PP to a party of horses small
e grande e i cavalli **fatto una gara.**
and big and the horses do.PP a race
'I went to a party of small and big horses and the horses had a race'.

b. FER4: prima ho fatto matematica
first have.PRES.1sg do.PP mathematics
e dopo ora di matematica **fatto un storia.**
and after hour of mathematics do.PP a story
'first I did maths and after the maths hour I did a story'.

c. FER8: **ho** **andato** a sci # uh non con la maestra
have.PRES.1sg go-PP to ski not with the teacher
e io **andato** giù.
and I go-PP down
'I went skiing... not with my teacher... and I went down'.

d. FER12: il soldato ha arrestato Bugs Bunny
the soldier have.PRES.3sg arrest-PP
e **portato** Bugs Bunny in prigione.
and take-PP to prison

'the soldier arrested Bugs Bunny and took Bugs Bunny to prison'.

(4-147) a. HEL5: **ho** **andato** alla casa
have.PRES.1sg go-PP at.the house
e mangiato un po' di sandwich
and eat-PP a bit of sandwich
e tu arrivato.
and you arrive-PP
'I went home and ate a bit of sandwich and you arrived'.

b. HEL7: **ho** **andato** a letto
have.PRES.1sg go-PP to bed
e veduto le altre scatole su mia scatola.
and see-PP the other box on my box
'I went to bed and saw the other boxes on my box'.

c. HEL13: mia amica **è** **venuta** a mia casa
my friend be.PRES.3sg come.PP-Fsg to my home
e trovato mia altra amica R.
and find-PP my other friend
'my friend came to my home and found my other friend R.'

d. HEL15: mio papà ha detto sì
my dad have.PRES.3sg say.PP yes
e **andato** giù
and go-PP down
e prendato uno uovo.
and take-PP an egg
'my dad said yes and I went downstairs and took an egg'.

Accomplishments are also marked by the present tense and the *imperfetto*, although the latter occurs very marginally. The present tense only affects the accomplishments in spontaneous production and virtually disappears after S6 in LOU and FER and after S8 in HEL. The highest number of accomplishments in the present tense is produced by LOU.

As evident from the following examples, LOU overextends the 3rd person singular of the present tense.

(4-148) a. LOU1: dopo va a mangiare
then go.PRES.3sg to eat-INF
uh e dopo mette la scarpa
and then put.on-3sg the shoe
e dopo va a scuola.
and then go.PRES.3sg to school
'then I went to eat and then I put my shoes on and then I went to school'.

b. LOU2: dopo mette la scarpa.
then put.on-3sg the shoe
'then I put my shoes on'.

c. LOU3: dopo va religione
then go.PRES.3sg religion
e dopo va a musica
and then go.PRES.3sg music
e dopo va a casa.
and then go.PRES.3sg to home
'then I went to religion class and then I went to music class and then I went home'.

d. LOU6: dopo va a dormire.
then go.PRES.3sg to sleep-INF
'then I went to sleep'.

To sum up, the marking of accomplishments is assigned to the bare past participle and the compound past. The distribution of these verb forms varies according to the individual learner, the time point of the observation, the type of task and the structuring of the narrative in spontaneous production.

4.2.2.4 Achievements

Table 4.26: MARKING OF ACHIEVEMENTS

LOU

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pres	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
Impf	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PP	3	5	4	4	5	7	6	5	4	4	3	6	3	3	7
CP	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2
TOT	5	6	4	5	5	7	6	5	4	4	3	8	5	5	9

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pres	0	16.7	0	20	0	0	0	0	0	0	0	0	0	0	0
Impf	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PP	60	83.3	100	80	100	100	100	100	100	100	100	75	60	60	77.8
CP	0	0	0	0	0	0	0	0	0	0	0	25	40	40	22.2

FER

N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Pres	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Impf	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
PP	6	4	3	2	9	6	5	8	2	4	3	2	2	3	3
CP	0	0	0	0	3	3	1	2	3	1	2	6	3	3	6
TOT	7	4	3	3	13	10	6	10	5	5	5	8	5	6	9

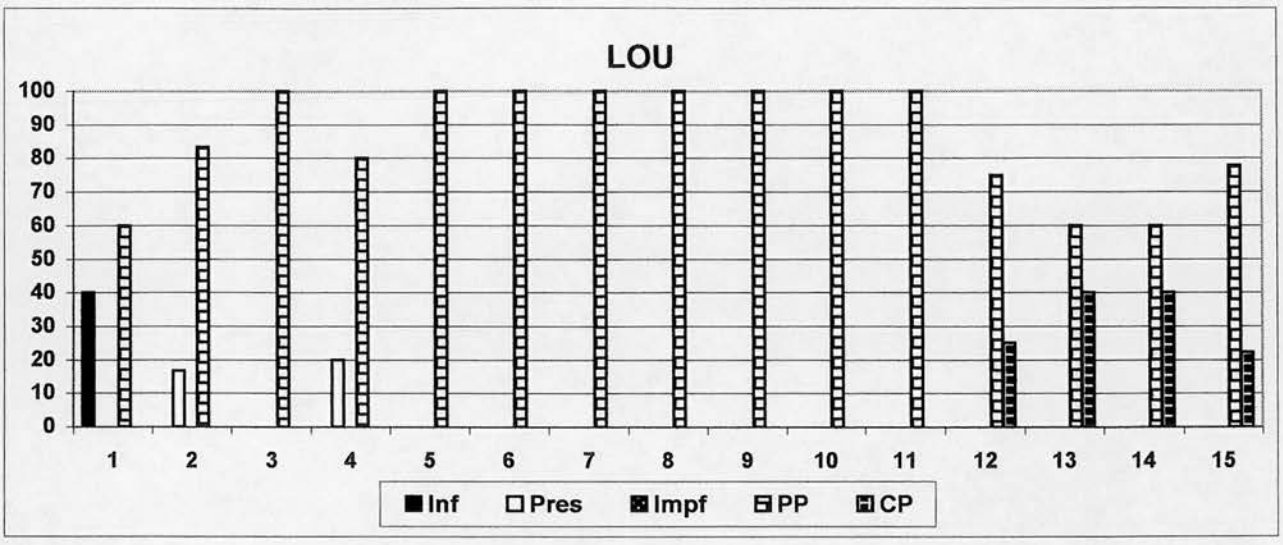
%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	14.3	0	0	33.3	7.69	0	0	0	0	0	0	0	0	0	0
Pres	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Impf	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0
PP	85.7	100	100	66.7	69.2	60	83.3	80	40	80	60	25	40	50	33.3
CP	0	0	0	0	23.1	30	16.7	20	60	20	40	75	60	50	66.7

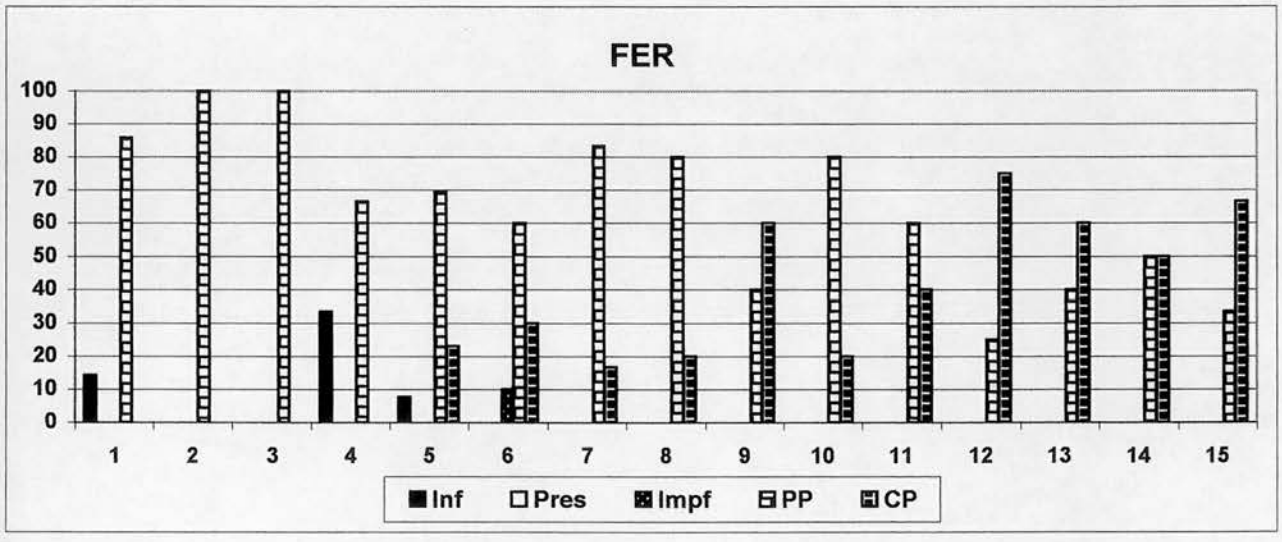
HEL

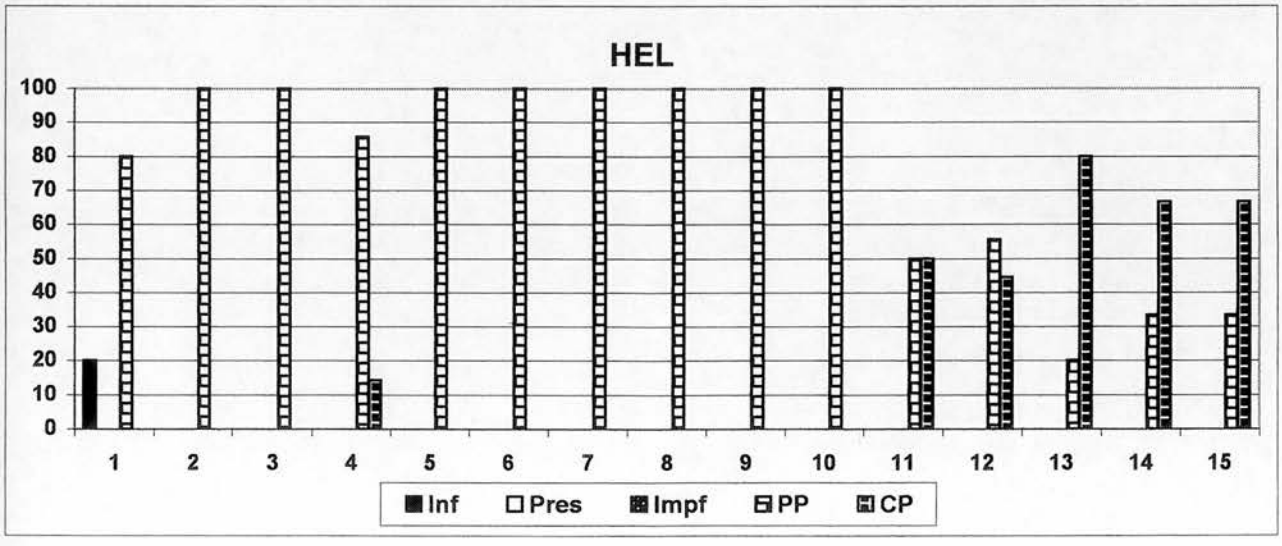
N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pres	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Impf	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PP	4	4	9	6	7	6	8	4	3	4	2	5	1	3	4
CP	0	0	0	1	0	0	0	0	0	0	2	4	4	6	8
TOT	5	4	9	7	7	6	8	4	3	4	4	9	5	9	12

%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Inf	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pres	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Impf	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PP	80	100	100	85.7	100	100	100	100	100	100	50	55.6	20	33.3	33.3
CP	0	0	0	14.3	0	0	0	0	0	0	50	44.4	80	66.7	66.7

Figure 4.15: MARKING OF ACHIEVEMENTS (%)







Achievements generally indicate an instaneous change that may affect the location of an entity (*cadere* 'fall', *arrivare* 'arrive', *scappare* 'escape') or its state/condition (*svegliarsi* 'wake up', *trovare* 'find', *esplodere* 'explode', *perdere* 'lose', *morire* 'die'). The most frequent achievements are those expressing change of location, i.e. *cadere* and *arrivare*. The marking of achievements is confined to the bare past participle and the compound past. The former is predominant throughout the study in LOU and up to S10 in HEL. In FER, up to S11, the bare past participle is still predominant but to a lesser extent than in LOU and HEL after S3. Examples of achievements in the bare past participle are presented in 4.2.1.1.

As to the point of appearance of the compound past, LOU first produced this form with achievements in S12. In FER it is present since S5, although only in spontaneous conversation; in controlled tasks, FER applied the compound past to achievements from S12. As to HEL, she started a consistent use of the compound past with achievements in S11. As already stated throughout the chapter, the compound past mainly consist of the auxiliary *avere* followed by a past participle. *Avere* functions as a default auxiliary, since the other auxiliary, *essere*, is seldom used. Like intransitive accomplishments, intransitive achievements fall within the category of unaccusative verbs and as such would select *essere*. The few intransitive achievements forming a compound past with *essere* are listed in 4.2.1.2.

The function of the compound past is to express pastness, as already shown in this chapter. Examples of achievements in the compound past are presented below.

(4-149) a. FER5: io ho caduto sulla testa.
I have.PRES.1sg fall-PP on.the head
'I fell on my head'.

b. FER6: ho caduto due volte.
have.PRES.1sg fall-PP two times
'I fell twice'.

c. FER9: il mio sorella è caduto del ski+lift.
the my sister be.PRES.3sg fall-PP of.the ski.lift
'my sister fell off the ski-lift'.

d. FER13: ha caduto della montagna.
have.PRES.3sg fall-PP of.the mountain
'he fell off the mountain'.

(4-150) a. FER12: il soldato ha trovato una bomba.
the soldier have.PRES.3sg find-PP a bomb
'the soldier found a bomb'.

b. HEL13: il bambino ha trovato un orso.
the boy have.PRES.3sg find-PP a bear
'the boy found a bear'.

c. HEL15: hanno trovato Skanki sotto il ponte.
have.PRES.3pl find-PP under the bridge
'they found Skanki under the bridge'.

(4-151) a. FER12: la bomba è esplosa.
the bomb be.PRES.3sg explode.PP-Fsg
'the bomb exploded'.

b. HEL12: la bomba ha esploduto.
the bomb have.PRES.3sg explode-PP
'the bomb exploded'.

(4-152) a. INV: e il bambino?
'and the boy?'
LOU13: ha perduto tutto.
have.PRES.3sg lose-PP everything
'he lost everything'.

b. HEL13: il bambino ha perduto tutto.
the boy have.PRES.3sg lose-PP everything
'the boy lost everything'.

(4-153) a. LOU14: Henry ha arrivato tardi.
have.PRES.3sg arrive-PP late
'Henry arrived late'.

b. INV: un giorno le capre [beep] a un fiume.
one day the goats to a river
'one day they [beep] to a river'.

LOU15-FER15-HEL15: hanno arrivato.

(4-154) a. FER12: Bugs Bunny è scappato.
be.PRES.3sg escape-PP
'Bugs Bunny escaped'.

b. LOU14: è scappato su disco volante.
be.PRES.3sg escape-PP on saucer flying
'he escaped on a flying saucer'.

c. HEL14: Bugs Bunny ha scappato su un disco
have.PRES.3sg escape-PP on a saucer
volante.
flying
'Bugs Bunny escaped on a flying saucer'.

(4-155) a. INV: perché Marylin era molto infelice?
'why was Marylin very unhappy?'
FER15: perché Skanki ha sparito.
because have.PRES.3sg disappear-PP

b. HEL15: Marylin era molto infelice
be.IMPF.3sg very unhappy
perché Skanki ha sparito.
because have.PRES.3sg disappear-PP
'Marylin was very unhappy because Skanki
disappeared'.

When preceding a bare past participle, the compound past generally expresses anteriority. The following examples highlight achievements that can be encoded either by the compound past or the bare past participle according to their position in the antecedent-subsequent sequence.

(4-156) a. FER8: qualcuno **ha** **caduto**
somebody have.PRES.3sg fall-PP
io **ho** **caduto**
I have.PRES.1sg fall-PP
e un.altro **caduto.**
and another fall-PP

'somebody fell, I fell, and somebody else fell'.

b. LOU12: **ha** **trovato** una bomba
have.PRES.3sg find-PP a bomb
e la bomba **esploduto**.
and the bomb explode-PP
'he found a bomb and the bomb exploded'.

c. HEL12: Bugs Bunny **ha** **scappato**
have.PRES.3sg escape-PP
e il soldato **trovato** una bomba.
and the soldier find-PP a bomb
'Bugs Bunny escaped and the soldier found a bomb'.

d. LOU13-FER13: **ha** **trovato** un orso
have.PRES.3sg find-PP a bear
e **spaventato**.
and scare-PP
'he found a bear and got scared'.

e. FER13: Bugs Bunny ha giocato a dadi con
have.PRES.3sg play-PP at dice with
il bambino e il bambino **perso** tutto.
the boy and the boy lose.PP everything
'Bugs Bunny played dice with the boy and the boy lost everything'.

f. HEL13: il bambino **ha** **caduto** dalla
the boy have.PRES.3sg fall-PP off.the
montagna e poi scalato la montagna.
mountain and then clim-PP the mountain
'the boy fell off the mountain and then he climbed the mountain'.

g. FER15: hanno cercato Skanki dappertutto
have.PRES.3pl look.for-PP everywhere
e poi **trovato** Skanki sotto il ponte.
and then find-PP under the bridge
'they look for Skanki everywhere and then they found Skanki under the bridge'.

To sum up, the marking of achievements is shared between the bare past participle and compound past, with the bare past participle being predominant, especially in LOU, throughout the study, and in HEL, up to S10. As for the marking of accomplishments, the alternation between past participle and the compound past depends on the individual learner, the time point of the observation, the type of task and the structuring of the narrative.

4.3 L2 ENGLISH AND L2 ITALIAN DATA: A COMPARISON

I will now compare the two groups of learners. In L2 English, the past morphology, both regular and irregular is primarily restricted to telic predicates, gradually spreading to activities and, marginally, to states later. This is consistent with the 'aspect hypothesis' (see 2.1). The presence of regularized past forms demonstrates the productivity of the *–ed* morpheme. The atelic predicates receiving past marking were mainly those activities and states that yielded a punctual interpretation. As discussed in 1.1.1ff, the viewing of a situation as a single, punctual event is a defining trait of the perfective aspect and the prototypical perfective meaning is conveyed by the past. The spread of the past morphology to activities shows that the children are starting to anchor their narratives in the past. However, as predicted by the 'aspect hypothesis', activities are preferably found in the progressive, which remained bare throughout the study. From S7, the progressive is overextended to states when these refer to the background of a situation. As shown in 1.1, backgrounding is expressed by the imperfective aspect, which is prototypically linked to stativity. Finally, the base form functions as a default form that decreases dramatically in the second half of the study.

Similarly, in L2 Italian, the base form, represented by the infinitive and the present, is almost absent in the second half of the study.[5] While scarcely using the infinitive, the children applied the present almost exclusively to durative predicates, which points to the intrinsic imperfective trait of this tense. The major verb forms produced by the children

are the bare past participle, the compound past and the imperfect. Telic predicates are generally encoded by the bare past participle and the compound past. However, the bare past participle competes with the compound past to fulfil the function of 'default past tense', although the bare past participle is more biased towards telic predicates, especially achievements. When joined through *e* ('and') to a following bare past participle, the compound past generally expresses anteriority. This pattern of auxiliary gapping in coordinates joined by *e* is recurrent in FER and HEL. The compound past is normally constructed with the auxiliary *avere*, which functions as a default auxiliary, since the other auxiliary, *essere*, emerged late and is seldom used. Interestingly, a correlation between auxiliary selection and past participle agreement was noticed.

The compound past, which surfaced at different time points in each child, principally occurred in spontaneous production, spreading to controlled tasks only from S9. This is when activities in the compound past started to increase and the perfective/imperfective opposition emerged. Thus, perfective aspect is expressed by activities in the compound past, which indicates foregrounding; imperfective aspect is expressed by activities in the imperfect, which indicates backgrounding. The imperfect is predominantly associated to activities, especially in FER and HEL, but it is mainly localised in controlled tasks. As to states, they are strongly linked to the imperfect in LOU thoughout the study, whereas in FER and HEL only up to S5-S6. After that, FER and HEL constantly underproduced the imperfect with states.

Both groups of learners construct their narratives paratactically, using connectives such as 'and/*e*' and 'then/*dopo*'. This narrative structuring is also found in L1 acquirers of English (see 2.1.1) and L1 Italian (see 2.1.2). The tense-aspect morphology of the L2 English learners appears to be more influenced by lexical aspect than the tense-aspect morphology of the L2 Italian learners. Although displaying a bias towards lexical aspectual categories, the L2 Italian group is also characterized by individual and task-induced variation. LOU's verb morphology is the most affected by lexical aspect, presumably because her interlanguage is at an earlier stage than that of FER and HEL. In LOU, the bare past participle is linked to telic predicates and the imperfect to states; her

tokens of compound past, which only surfaced in S8, are the fewest in the group. Conversely, in FER and HEL, the compound past surfaced earlier and the imperfect is spreading from states to activities, which represents a later stage in the 'aspect hypothesis' (see 2.1). What is not predicted by the 'aspect hypothesis' is FER and HEL underextending the imperfect to states in the second half of the study. Interestingly, while these L2 Italian learners underextend the imperfect to states, the L2 English learners overextend the progressive to states. Since both the imperfect and the progressive belong to the imperfective area (see 1.1.2), which is prototypically linked to stativity (see 1.3.2), this pattern of overextension/underextension shows the bi-directional effect of the relationship between stativity and imperfectivity. This will be part of the general discussion in the next chapter.

CONCLUSION

This chapter has presented the results of the study through two types of analysis that differ in their approach to the relationship between tense-aspect morphology and lexical aspect. The *across-category* analysis examined the spread of verb forms across the four lexical aspectual classes. The verb forms analyzed are: the irregular past, the regular past and the progressive for L2 English; the bare past participle, the compound past and the progressive for L2 Italian. While focusing on the learner's use of tense-aspect morphology, this type of analysis is affected by the more frequent production of one lexical aspectual class versus another. In both groups of learners, accomplishments exhibit the highest number of tokens; activities follow closely, whereas achievements and states lag behind, with states displaying the lowest number of tokens.

These imbalances were controlled through the *within-category* analysis, which portrayed morphological development within each of the four lexical aspectual classes. In addition to the verb forms examined in the *across-category* analysis, the *within-category* analysis also included the base form in L2 English and the infinitive as well as the present in L2 Italian.

The intersection of these two analyses provides a thorough description of the children's tense-aspect interlanguage, which, in both groups of learners, is affected by lexical aspect. However, this influence is stronger in the L2 English group whereas the L2 Italian group displays more individual and task variation. A bi-directional parallelism was noticed in an overextension/underextension pattern concerning the link stativity-imperfectivity: in the second half of the study, the L2 English children overextend the progressive to states whereas the L2 Italian children underextend the imperfect with states. This and other findings will be discussed in the next chapter, where the role of language transfer will also be pinpointed.

NOTES

[1] A preliminary analysis of these bi-directional data is presented in Rocca (2002).

[2] As stated in 3.2, each participant is referred to by a three-letter code. This is followed by a number indicating the session when the recording took place.

[3] Some researchers (Shirai 1991; Shirai & Andersen 1995; Housen 1995) classify the predicate *say* as an achievement. Instead, I consider it as a type of activity, in line with Van Valin & LaPolla (1997). In fact, this predicate satifies the diagnostics for activities in that it is compatible with *for X time* but odd with *in X time*: *Mary said 'no' for/??in five minutes*.

[4] The examples in (127a), (127b) and (127d) also show an overextension of the third person singular to the first person singular.

[5] However, the base form in English differs from the base forms in Italian in its being a stem with 'zero' morphology. In fact, in Italian, bare stems are disallowed and therefore even a non-finite form like the infinitive is subject to suffixation.

CHAPTER 5

GENERAL DISCUSSION

INTRODUCTION

This final chapter discusses the findings of the bi-directional study in the light of the research questions and hypotheses (see 3.1) stemming from the typological-acquisitional background illustrated in the initial chapters. These research questions and hypotheses are repeated here at the beginning of each relevant section. This discussion pulls together the overlapping strands of inquiry that inspired this study: the acquisition of tense-aspect morphology in child L2 learners (5.1), with a focus on child L2 English (5.1.1.) and child L2 Italian (5.1.2), the relationship between L1 acquisition and child L2 acquisition (5.2) on the one hand and between child L2 acquisition and adult L2 acquisition (5.3) on the other. Importantly, this chapter aims at delineating child L2 acquisition as a distinctive area of investigation that bridges L1 acquisition and adult L2 acquisition.

5.1 CHILD L2 ACQUISITION OF TENSE-ASPECT MORPHOLOGY

Q1. How are child L2 tense-aspect forms acquired?

H1.1. There are prototypical links between tense-aspect morphology and lexical aspect: simple past/*passato prossimo*-telicity; progressive-activity; *imperfetto*-stativity.

H1.2. These prototypical links are transferable when the necessary developmental conditions are met.

This study finds its collocation within the framework of the aspect hypothesis, which is rooted in the theories of lexical aspect illustrated in the first chapter. As argued in 2.1, prototypical links between verb forms and verb classes are highlighted in the predictions of the aspect hypothesis. These prototypical links are substantiated in the bi-directional data in that the acquisition of tense-aspect morphology appears to be

influenced by lexical aspect. However, the tense-aspect morphology of the L2 English learners appears to be more linked to lexical aspect than the tense-aspect morphology of the L2 Italian learners.

In both groups of learners, telicity is conveyed by past morphology, i.e. the irregular and regular past in L2 English and the bare past participle and compound past in L2 Italian. The bare past participle is more biased than the compound past towards telic predicates, especially achievements. Thus, the prototypical link between perfective forms-telicity is more evident in the bare past participle than in the compound past. However, both the bare past participle and the compound past compete for the function of 'default past tense'. The progressive and the *imperfetto* are principally associated to activities. The link *imperfetto*-activities is particularly prominent in FER and HEL. According to the aspect hypothesis, the imperfective past first marks states and later spreads to activities. However, the prototypical link *imperfetto*-states is still visible. States are strongly linked to the *imperfetto* in LOU throughout the study, whereas in FER and HEL only up to S5-S6. LOU's verb morphology is the most affected by lexical aspect, presumably because her interlanguage is at an earlier stage than that of FER and HEL, which is more advanced, as demonstrated by the spread of the *imperfetto* to activities.

I also hypothesized that these prototypical links are transferable. In this section, I will attempt to show language transfer through intra-L1-group homogeneity and, when applicable, through inter-L1-group heterogeneity (see 2.2.3.). In other words, keeping the same L2 constant, the results of my study would show that learners from the same L1 present similar interlanguage patterns, which are different from the ones exhibited by learners having other native tongues. More on language transfer in 5.2 and 5.3.

5.1.1 Child L2 English

Q2. What are the developmental patterns exhibited by child L2 English learners?

H2.1. The progressive first occurs with activities and later is overextended to states.

H2.2. The simple past, both regular and irregular, first occurs with telic predicates, later spreads to activities and finally to states.

In child L2 English, the progressive is strongly associated with activities and, from the second half of the study, it is overextended to states when these refer to the background of a situation. As discussed in 1.1, backgrounding is expressed by the imperfective aspect, which is prototypically linked to stativity. Past morphology, both regular and irregular is predominantly found with telic predicates, gradually spreading to activities and later only marginally to states. Furthermore, the activities and states carrying past marking were essentially those yielding a punctual interpretation. A punctual viewpoint is a prerogative of perfectivity and the prototypical perfective meaning is carried by the past tense (see 1.1.1ff).

These results are homogeneous within the L2 group whereas the comparison with other child L2 English learners shows both convergences and divergences. The restriction of both regular and irregular past morphology to telics was also noticed in the L1 German learners of Rohde (1996), whereas in the L1 French learners and in the L1 Dutch learners of Housen (1995), this semantic restriction seems to affect only the regular past. As to the link progressive-activities, the results of my study converge with those in Housen (1995) and Rohde (1996). However, the results concerning stative progressives are divergent. My study shows a systematic overextension of the progressive to states whereas Rohde (1996) reported only three instances of that. This divergence is crucial for the issue of language transfer, because German, unlike Italian, does not encode the perfective/imperfective distinction. Like German, Dutch does not encode this aspectual opposition. This could make the stative progressives in Housen (1995) problematic. However, as discussed in 2.2.2.1, certain predicates (*rain*, *shine*, *stand*, *stay*) that Housen analyzed as states could be classified as activities. Furthermore, the highest number of stative progressives was produced by a French-Dutch bilingual, therefore, this overextension could be influenced by the French tense-aspect system, which is very close to the Italian one. Like Italian and French, Spanish has an imperfective past. Interestingly, stative progressives were frequent in the interlanguage of Rogelio, the L1 Spanish learner observed in Robison (1990). All this indicates that the overgeneralization of the progressive to states is an effect of language transfer.

5.1.2 Child L2 Italian

Q3. What are the developmental patterns exhibited by child L2 Italian learners?

H3.1. The *imperfetto* first occurs with states, then spreads to activities and later is underproduced with states.

H3.2. Perfective forms, i.e. bare past participle and compound past, first occur with telic predicates, later spread to activities and finally to states.

H3.3. The perfective auxiliary *avere* is overgeneralized.

H3.4. The perfective auxiliary *essere* emerges later and with telic predicates.

H3.5 Auxiliary selection and past participle agreement are correlated.

The L2 Italian results are characterized by individual and task variation, which makes them less homogeneous than the L2 English ones. However, some common patterns can still be identified. The *imperfetto* is closely associated to activities and also to states, although to a lesser extent. In fact, two of the three children underproduced the *imperfetto* with states in the second half of the study. Interestingly, both Calleri (1992) and Wiberg (1996) indicate that the *imperfetto* is strongly associated with states, especially *essere*. In my study, the prototypical link *imperfetto*-states is generally constant in LOU but in FER and HEL, it is most visible only in the initial sessions. This points to a different interlanguage development in these children. According to the aspect hypothesis, the spread of the imperfective past to activities occurs after its initial restriction to states. What is different here is that the stronger the link between *imperfetto* and activities, the weaker its link with states. This overproduction of the *imperfetto* with activities and its underproduction with states appear to be induced by the language transfer, since in English the progressive is prototypically linked to activities but prototypically avoided with states. More on language transfer in the next section.

The spread of perfective forms yielded more complex results from the viewpoint of individual and developmental variation. In LOU, the bare past participle is restricted to telics throughout the study, occasionally marking activities from S7 and states from S10. In FER and HEL, although more biased towards telics, the bare past participle occurred with activities since S1, appearing with states from S5-S6. Since FER and HEL are more advanced than LOU, it is plausible to postulate a stage where the bare past participle spreads from telics to activities. As to the compound past, it is indeed

linked to telics, especially accomplishments in FER and HEL. It surfaced with accomplishments in LOU (S8) and FER (S1) and with achievements in HEL (S4). From the session after its emergence, all the three children extend the compound past to activities and later (S10 in LOU and HEL, S7 in FER) to states. Thus, the compound past appear to be more evenly spread than the bare past participle across verb classes. This is in line with Wiberg (1996 – see 2.2.2.2), who indicated that the compound past represents a 'default past tense' for L2 Italian learners. However, in my study, both the bare past participle and the compound past function as default past tenses. Both the bare past participle and the compound past can be found in single main clauses. Furthermore, the bare past participle tends to appear after a compound past in co-ordinate clauses with the connector *e* ('and'). This pattern compound past-bare past participle generally reflects the sequence anteriority-posteriority.

The bias of the bare past participle towards telic predicates was previously noticed in the L1 Chinese learners of Calleri (1992). However, these children generally produced bare past participles that were morphologically correct, unlike the L1 English children of my study, who (HEL in particular) tended to leave the bare past participle of unaccusatives unmarked. For example, all three female participants generally used the bare past participle *andato*, instead of *andata*, when referring to themselves individually. Also, they overgeneralized the auxiliary *avere*. This overuse of *avere* is absent in Calleri's L1 Chinese children, who, on the contrary, overextended *essere*. This IL pattern in the Sinophone learners cannot be linked to any congruent L1 pattern. However, although the inter-L1-heterogeneity criterion does not seem to be applicable here, the Sinophone learners and the Anglophone learners are indeed different in their IL production of past participle and compound past forms.

Thus, failure to agree the past participle with the subject and overextension of *avere* appear to be a pattern of the L1 English learners, whose choice of the auxiliary is correlated with the presence or absence of an agreement on the past participle. In fact, as shown in 2.2.2.2, the correlation between auxiliary selection and past participle agreement was previously noticed in the L1 English children of Rocca (1996). This lack of agreement on the past participle prevents the emergence of the auxiliary *essere* inducing the overgeneralization of *avere*, which consequently become the default

auxiliary. *Essere* surfaced during the second half of the study with telic predicates but is seldom used. This phenomenon will be further discussed in the next section. Some examples of overgeneralized *avere* were also produced by the Italian-Swedish learners of Wiberg (1996). However, the comparison with this study is hampered by the particular bilingual status of these learners, who, if they had been exposed to the Southern Italian varieties, they could have acquired different rules for auxiliary selection (see Ledgeway 2000 for a treatment of unaccusativity in Southern dialects).

The overgeneralization of *avere* with change of location verbs such as *andare* appears to be at odds with Sorace (1993, 1995a, 1995b, 2000 - see 1.3.1.1), according to whom the acquisition of *essere* starts from change of location verbs such as *andare*, which elicit stronger preferences for *essere* across proficiency levels. However, the fundamental methodological differences between Sorace's studies and this one make the respective findings difficult to compare. These methodological differences pertain to data elicitation procedures and learners' profiles. In fact, I used production data from naturalistic child L2 learners whereas Sorace used acceptability judgements from tutored adult L2 learners. In other words, although the participants in my study scarcely produce *essere* with change of location verbs, it is still possible that they could be able to accept as grammatical sentences containing *essere* with change of location verbs. Similarly, although Sorace's learners express strong preferences for sentences containing *essere* with change of location verbs, it is still possible that they could struggle to produce them in spontaneous conversation. To reconcile the differences between these findings is a challenge for future research.

To conclude, this section on child L2 acquisition of tense-aspect morphology presented the findings from my study and compared them with those from other child L2 studies in the attempt to show the manifestations of language transfer through intra-L1-homogeneity and inter-L1-heterogeneity, when applicable. In the next section, I will present another type of evidence for language transfer, which is both bi-directional and developmental.

5.2 CHILD L2 ACQUISITION AND L1 ACQUISITION

Q4. What are the similarities and dissimilarities between child SLA and L1 acquisition?

H4.1. Like L1 learners, child L2 learners are characterized by morphological sensitivity.

H4.2 Unlike L1 learners, child L2 learners are influenced by language transfer.

In this section, I will consider the dissimilarities between child L2 acquisition and L1 acquisition from a standpoint that is both bi-directional and developmental. The similarities will be discussed in the next section, where child SLA will be compared to adult SLA. The fundamental importance of first language acquisition as a ground for comparison resides in its being deprived of language transfer. The children's interlanguage development will be compared to the acquisitional patterns of two L1s: the learner's first language and the language that is being learned as L2. As discussed in 2.2.3, a crucial type of evidence for language transfer is the manifestation of a convergence between the learner's interlanguage and the learner's first language. However, in my view, the case for language transfer would be stronger if a convergence between the learner's interlanguage and the learner's first language could be linked to a divergence between the interlanguage and the L1 acquisition patterns of the language that the learner is targeting. Therefore, I will compare the developmental path of the child L2 learners in my study with that of children acquiring the same language as L1. In other words, the child L2 English data will be compared with the findings from L1 English acquisition illustrated in 2.1.1 and similarly, the child L2 Italian data will be compared with the findings from L1 Italian acquisition illustrated in 2.1.2. If the comparison pinpoints divergences that could be associated to a pattern in the learner's native tongue, this would provide evidence for L1 influence at a point of interlanguage development where the learner leaves the 'successful' acquisitional track exemplified by a L1 acquirer. Since, this two-way comparison requires evidence from two L1s, bi-directionality comes into play providing a reversible L1-L2 relationship where the two languages represent both the source and the target.

Chap. I illustrates English and Italian tense-aspect systems constrastively; chap. II considers L1 acquisition of tense-aspect morphology in English and Italian. This allows an analysis of tense-aspect from both a typological and an acquisitional

standpoint. Thus, tense-aspect is defined not only in terms of its function but also in terms of the developmental path that leads to its mastery, since first language acquisition is the successful route to acquisition *par excellence*: in fact, other things being equal, all children become native speakers of a language. Most importantly, language transfer is absent in L1 acquisition. Therefore, the child L2 data I gathered will be disentangled against this typological-acquisition background.

In L1 acquisition of English, the progressive is the first morpheme to emerge. It is primarily restricted to activities and only occasionally it is overextended to statives. In my child L2 English data, the progressive is also generally found with activities, but unlike child English, it is later systematically overextended to states. This overextension conforms to a pattern in Italian, namely the prototypical link *imperfetto*-states. Thus, the children would perceive a similarity between the progressive and the *imperfetto*, both belonging to the imperfective area (see 1.1.2ff), and overextend the progressive to states as a result of language transfer. What would be transferred is the prototypical link *imperfetto*-states. Likewise, in my child L2 Italian data, the transfer of the prototypical link progressive-activities would result in the underextension of the *imperfetto* to states. However, this underextension never occurs in child Italian, where the *imperfetto* is often overextended at the expense of the *passato prossimo*. In fact, L1 Italian children initially use the *imperfetto* as past tense that distances them from the situation they are describing (see 2.1.2). This underextended *imperfetto* in child L2 Italian is the reverse of the overgeneralized progressive in child L2 English, but it parallels the avoidance of the progressive with states in English: as discussed in 1.3.2, the occurrence of the progressive with states is considered as a marked choice.

This pattern of over- and underproduction reveals the bi-directional transferability of prototypical links: the overproduction of the progressive with states is influenced by the prototypical link *imperfetto*-states whereas the underproduction of the *imperfetto* with states is influenced by the prototypical link progressive-activities. Furthermore, these prototypical links are transferred in compliance with the two transfer factors outlined in 2.2.3.1: the developmental factor and the iconic factor. The iconic factor relates the transferability of a given L1 property to the transparency of its form-

function relationship. This is reflected in the prototypical links, since, by being prototypical, they are also transparent.

The developmental factor indicates that for language transfer to occur, the learner must first reach the point of development where the linguistic property in question becomes relevant. In fact, both the overextended progressive and the underextended *imperfetto* occur later, after these verb forms have first marked the lexical aspectual categories they are prototypically linked to. In fact, before being overextended to states, the progressive first encodes activities and similarly, the *imperfetto* first encodes states before being underextended to them. Thus, first the L2 prototypical links are acquired and then the L1 prototypical links are transferred.

The underproduction of the *imperfetto* with states is related to a rise in its encoding of activities. In other words, the *imperfetto* moves away from the marking of states into the marking of activities. If the underproduction of the *imperfetto* with states arises from the transfer of the prototypical link progressive-activities, then it is logical to argue that this link also affects the distributional bias of the *imperfetto* towards activities. However, since the spread of the imperfective past to activities represents a general acquisitional stage hypothesized by the aspect hypothesis, language transfer is less visible. Interestingly, though, the child L2 Italian data in my study show a strong association of the *imperfetto* with activities. Such a high incidence of *imperfetti* with activities is not reported in child Italian or in the child L2 Italian studies of Calleri (1992) and Wiberg (1996), where the learners' native tongues are deprived of an obligatory progressive form. Thus, the recurrence of the *imperfetto* with activities could also be attributed to the transfer of the prototypical link progessive-activities.

The transferability of prototypical links points to a view of language transfer as a conceptual filter on the options available to the learner. This is evident in the overgeneralization of the *avere* as perfective auxiliary and in the related lack of morphological marking on the past participle. Since English is deprived of this linguistic property, i.e. *essere*-selection and past participle agreement, the learner does not expect to find this feature in the target language. Furthermore, *essere*-selection and past participle agreement indicate an affected subject. Since the prototypical subject is embodied by a non-affected agent, an affected subject represents a marked

subject (see 2.1 and 2.1.2). Although present since the outset of the study, the bare past participle of unaccusatives was predominantly left unmarked, as stated in 5.1.2. However, instances of morphological agreement on the bare past participle of unaccusatives were recorded (see Table 4.14). Past participle agreement and *essere*-selection are linked in that they are both indicators of an affected subject. Since morphological agreement on the bare participle emerges before *essere*, this agreement is a developmental pre-requisite that ensures the emergence of *essere*. Lack of past participle agreement prevents the emergence of *essere* and consequently induces the overgeneralization of *avere*. The few instances of compound past selecting *essere* also contain past participles that are correctly agreed with the subject.

Like in child Italian, the bare past participle emerges before the *passato prossimo* and the auxiliary is often missing (see 2.1.2). However, in child Italian the auxiliary is almost never incorrectly selected. Initially, the bare past participle and the *passato prossimo*, which are treated like adjectives, encode resultativity. Therefore, they are predominantly found with telic predicates. Importantly, unlike in the child L2 Italian data of my study, in child Italian the past participle of unaccusatives always carries the morphological marking of affectedness, which entails a gender and number agreement with the subject. Even when the past participle surfaces in its bare form, it systematically agrees in gender and number with the subject of unaccusatives. Furthermore, *essere* emerges relatively early. Thus, in child Italian as well as in the child L2 learners of my study, morphological agreement on the bare past participle appears to be a developmental pre-requisite for the emergence of *essere*. However, unlike child Italian, the interlanguage of these Anglophone learners displays erratic marking on the bare past participle of unaccusatives. This could explain the late emergence of *essere* and its unfrequent use.

To conclude, this section presented a comparison between child L2 acquisition and L1 language acquisition indicating how the divergences that arose between them could be explained through language transfer. Nonetheless, a convergence is also evident, namely that child L2 learners, like L1 acquirers, exhibit morphological sensitivity (see 2.2.3.2), which will take us to the discussion in the next section.

5.3 CHILD L2 ACQUISITION AND ADULT L2 ACQUISITION

Q5. What are the similarities and dissimilarities between child SLA and adult SLA?

H5.1 Like adult L2 learners, child L2 learners are influenced by language transfer.

H5.2 Unlike adult L2 learners, child L2 learners are characterized by morphological sensitivity.

In this section I will compare child L2 acquisition with adult L2 acquisition in the light of the findings from my study and from the L2 acquisition studies reviewed in Chap. 2. The adult L2 studies addressing the role of language transfer in the acquisition of tense-aspect morphology (see 2.2.3.2) indicates that the L1 form-function relations are reflected in the interlanguage (Flashner 1989). In other words, the L1 tense-aspect system constrains the learner's expectations about the L2 tense-aspect system, predisposing the learner towards certain interlanguage options and not others. As argued in the previous section, the view of language transfer as a conceptual filter is consistent the notion of transferable prototypical links. What I propose here is an account of language transfer of tense-aspect that is complementary to the notion of transferable prototypical links.

Specifically, as discussed in Ch.1, the English and the Italian tense-aspect systems diverge in their grammaticalization of imperfectivity. Italian encodes the perfective/imperfective distinction, thus covering the whole imperfective area. Conversely, since English encodes the progressive/nonprogressive distinction, its scope is narrower and confined to progressivity. This divergence in the two systems has repercussions in their encoding of stativity, which in English can not receive progressive marking except for stage-level properties or marked aspectual choices (see 1.3.2). Therefore, the default option for states in the past is precisely the simple past. This would predispose L1 English learners of Italian towards keeping the same option, which would result in an overextension of perfective forms to imperfective contexts. In fact, in FER and HEL, the underproduction of the *imperfetto* with states is related to an overproduction of the bare past participle or the compound past with this verb class. On the other hand, since Italian imperfectivity has a wider scope, Italian learners of English are faced with the problem of narrowing this scope; they would expect an imperfective form for the marking of states and the only 'official'

imperfective form they would find is the progressive. This would result in the progressive being overextended to states, which is in fact what DAN, MAT and BER systematically did throughout the second half of the study.

Thus, like adult L2 learners, child L2 learners transfer the form-function relations of their L1 tense-aspect system into their interlanguage. However, I also agued that, unlike adult interlanguage and like child language, child interlanguage exhibits morphological sensitivity. Slobin (1993 – see 2.2.3.2) indicated that the crucial difference between L1 acquisition and adult L2 acquisition is that unlike the latter, the former is characterized by a productive use of morphology in the early phases of grammatical development. On the basis of this, I hypothesized that child L2 learners are more similar to L1 acquirers than to adult L2 learners with respect to morphological productivity.

Let's start with L2 English. Findings from studies conducted with adults and children within the framework of the aspect hypothesis are generally consistent in stating that past morphology is strongly associated with telic predicates whereas progressive morphology is strongly associated with durative predicates, with activities receiving more *–ing* marking. However, this is not the whole story. I will now compare the development of verb morphology in MAT and Lavinia (Perdue 1993). MAT is one of children I observed. At the beginning of the study, he was seven and had been in England for six months. He had no previous knowledge of English before coming to England. His L2 English instruction consisted of a daily 30-minute lesson at the European School. His peers were native speakers of Italian, except for an English neighbour he occasionally played with. Lavinia is the most proficient L1 Italian learner of English in the ESF project. Like MAT, at the beginning of the study she had been in England for six months. Unlike MAT, though, she was receiving substantial L2 exposure: she was enrolled in a clerical English language skills course, and her child was attending an English nursery school, which gave her plenty of opportunities to interact with native speakers. Importantly, she was highly motivated.

Despite all this input, Lavinia's first regular past (*explained*) emerged after a year's stay and the *-ed* morpheme started to become productive after 14-15 months' stay. What makes this interesting is the fact that Lavinia is one the most successful learners

in the ESF project. Perdue (1993:95) defined Lavinia's interlanguage development as 'slow and gradual' with respect to morphological marking of tense-aspect. On the contrary, MAT first produced the *–ed* morpheme in the second session (*arrived, escaped*) and in the fourth session he starts to overgeneralize it (*digged up*). In other words, the past morpheme is productive in MAT from the beginning of the study, after a six-month stay. Similarly, in Rhode (1996 – see 2.2.2.1), two L1 German children learning English naturalistically develop morphological productivity during only a six-month stay in California.

As to L2 Italian, a comparison between the two Chinese children in Calleri (1992 – see 2.2.2.2) and the four Chinese adults in Giacalone Ramat (1990 – see 2.2.1.2) highlight that the children's tense-aspect system is richer. In fact, the *imperfetto*, which constitutes late acquisition, is present in the children's interlanguage but not in the adults'. What makes this comparison interesting is the fact that at the beginning of the observation one child had been resident in Italy for only two months, whereas one adult had already been resident in Italy for four years. Thus, these child L2 learners appear to be more sensitive to the L2 temporal morphology than the adult L2 learners from the same L1. Similarly, the interlanguage of the child L2 learners I observed displays morphological productivity, since the *imperfetto* is present since the first session and the basic forms, i.e. the infinitive and the present, are scarcely used, being virtually absent in the second half of the study. However, since these children had been in Italy for almost five years when the observation began, it is less plausible to argue for a fast-progressing morphological development. Instead, what these child L2 data show is that the learners' tense-aspect morphology is still developing, despite having spent almost five years in the L2 country with virtually no L2 education.

CONCLUSION

The discussion presented in this chapter aimed at delineating child L2 acquisition as a field that partakes of both L1 acquisition and adult L2 acquisition. Like L1 acquisition and unlike adult L2 acquisition, child L2 acquisition is characterized by morphological sensitivity. Like adult L2 acquisition and unlike L1 acquisition, child

L2 acquisition is characterized by language transfer. The effects of language transfer are analyzed though various types of evidence: homogeneity within a group of learners from the same L1; heterogeneity within a group of learners with different L1s; convergence between IL and L1; divergence between IL and L1 acquisitional patterns of the target language. Findings generally support the research questions and hypotheses that guided the bi-directional study. However, this study raises other issues that represent a potential for further research, as will be outlined next.

CONCLUSION

This dissertation has explored the development of tense-aspect morphology in a bi-directional study involving two typologically different languages, Italian and English. The first chapter presented a theoretical overview of tense-aspect in these two languages. The focus was on grammatical aspect and lexical aspect, the interaction of which produces the following prototypical links: simple past/*passato prossimo*-telics, progressive-activities, *imperfetto*-states. In the second chapter, these prototypical links found acquisitional support within the framework of the 'aspect hypothesis', which applies to both first and second language acquisition.

The findings of this study indicate that the L2 tense-aspect morphology of both groups of learners appears to be influenced by lexical aspect, although this influence is stronger in the L2 English learners. In L2 English, the past morphology, both regular and irregular is primarily restricted to telic predicates, gradually spreading to activities and, marginally, to states later. The atelic predicates receiving past marking were mainly those activities and states that yielded a punctual interpretation. However, as predicted by the 'aspect hypothesis', activities are preferably found in the progressive, which remained bare throughout the study. In the second half of the study, the progressive is overextended to states when these refer to the background of a situation.

Although displaying a bias towards lexical aspectual categories, the L2 Italian group is characterized by individual and task variation. Telic predicates are generally encoded by the bare past participle and the compound past. However, the bare past participle and the compound past compete for the function of default past tenses, although the bare past participle is more biased towards telic predicates, especially achievements. The compound past generally expresses anteriority, when joined through co-ordination to a following bare past participle. The compound past is normally constructed with the auxiliary *avere*, which represents a default auxiliary, since the other auxiliary, *essere*, emerged late and is seldom used. Interestingly, a correlation between auxiliary selection and past participle agreement was noticed. The compound past, which surfaced at different time points in each child, principally

occurred in spontaneous production. On the other hand, the imperfect is mainly localised in controlled tasks and is predominant with activities especially in the two older children. As to states, they are strongly linked to the imperfect in the youngest child throughout the study. In the two older children, this link was strongest initially. In the second half of the study, they constantly underproduced the imperfect with states.

These results highlight certain interlanguage patterns that are either absent or very marginal in first language acquisition: overproduction of the progressive with states, underproduction of the *imperfetto*, overgeneralization of the perfective auxiliary *avere*. I hypothesized that these patterns are induced by language transfer, which is viewed as a constraint that predisposes the learner towards certain options and not others. More specifically, the typological similarity between the progressive and the *imperfetto*, both belonging to the imperfective area, would result in a bi-directional effect of transfer. The progressive is overextended to states because the learner transfers the prototypical link *imperfetto*-states; similarly, the *imperfetto* is underextended to states because the learner transfers the prototypical link progressive-activities, resulting in an underproduction of the *imperfetto* with states. It could also be argued that the link *imperfetto*-activities results from transferring the prototypical link progressive-activities. Here, language transfer is less noticeable because the spread of the imperfective past to activities represents a general acquisitional stage predicted by the aspect hypothesis. However, this study shows a strong link *imperfetto*-activities that is not reported in other child L2 Italian studies nor in L1 Italian studies. Thus, the high incidence of *imperfetti* could also be explained through language transfer.

Language transfer occurs when the learner has reached the necessary point of development. In other words, these patterns of overextension and underextension would manifest themselves after the relevant L2 prototypical links have been acquired. Thus, before being overgeneralized to states, the progressive first marks activities. Similarly, the *imperfetto* first appears with states, before being avoided with them. As to the overgeneralization of *avere*, this is brought about by a failure to agree the past participle with the subject because of L1 influence. The phenomenon relating *essere*-selection to past participle agreement is not reflected in an English equivalent.

Therefore, this 'absence' in the L1 would make it harder for learners to take in this specific L2 morpho-syntactic feature. Furthermore, past participle agreement indicates an affected subject, which, being a marked category, can represent a problem for the L2 learner.

What makes the transfer issue even more interesting is the focus on child L2 learners. Child SLA overlaps with first language acquisition and adult second language acquisition. Like children acquiring their native tongue, child L2 learners are sensitive to morphology. However, like adult L2 learners, child L2 learners have already acquired a native tongue that could impact on the acquisition of a second language. The effects of language transfer are analyzed though various types of evidence: homogeneity within a group of learners from the same L1; heterogeneity within a group of learners with different L1s; convergence between interlanguage and L1; divergence between interlanguage and L1 development of the language that is being learned as L2. Findings generally support the research questions and hypotheses that guided the bi-directional study. However, this study also raises issues for potential future research. Among them, the following:

a) ultimate attainment: the L2 Italian children are still learning, despite having been in the host country for almost five years with virtually no L2 education. Does child interlanguage ever fossilize?
b) task effect: the L2 Italian children appear to vary their use of verb forms according to the demands of the task. If this is a task effect, why were the L2 English children not affected by it?
c) individual variation: as to learners' profiles, the L2 Italian group is more homogenous than the L2 English group. So, why is there more individual variation in the L2 Italian group than in the L2 English group?

Personally, I would like to investigate the pedagogical implications of these findings so as to analyze the interface of learning and teaching. Child SLA overlaps with L1 acquisition and adult L2 acquisition. With L1 acquisition it shares morphological sensitivity whereas with adult L2 acquisition it shares language transfer. Understanding child SLA is fundamental for the creation of language curricula that enable the child to use learning strategies, enhancing morphological sensitivity while controlling language transfer. What child L2 acquisition could offer is a new (and promising) perspective on second language education.

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